

VOLUME CIV

NUMBER THREE

# THE NATIONAL GEOGRAPHIC MAGAZINE

SEPTEMBER, 1953

In the London of the New Queen 291

H. V. MORTON

With Map and 41 Illustrations, 31 in Natural Colors

From Tucson to Tombstone 343

With Map and 40 Illustrations

30 in Natural Colors

MASON SUTHERLAND

Crickets, Nature's Expert Fiddlers 385

With 10 Illustrations CATHERINE BELL PALMER

Along the Yukon Trail 395

With Map and 15 Illustrations

8 in Natural Colors

AMOS BURG

American Family in Afghanistan 417

With Map and 11 Illustrations

REBECCA SHANNON CRESSON

Sixty-two Pages of Illustrations in Color

PUBLISHED BY THE  
NATIONAL GEOGRAPHIC SOCIETY  
WASHINGTON, D. C.

\$6.50 A YEAR

65¢ THE COPY





## In the London of the New Queen

291

By H. V. MORTON

**T**HE Coronation of Queen Elizabeth II is now a brilliant memory. The flags and the hunting have been taken down. The grandstands have been demolished. The golden coach is back in its mews and the Crown Jewels are back in the Tower of London.

While it is a memory, it is a historic memory that will not perish. It caught the imagination of a world starved for color and romance. An age that has split the atom and talks of invading the moon watched with emotion and with awe as the trumpets of chivalry sounded and the knights and the heralds led a young queen to her crowning in what seemed to be an enchantment staged by Merlin.

It may well be that a hundred years from now some historian will take down this number of the NATIONAL GEOGRAPHIC MAGAZINE and search for details of the scene that may help him to shake up the dust of history and blow life into it; and it is with an eye on the unborn author of *Elizabeth II, Her Life and Times*, that I set down the things I saw and the thoughts that came to me in the London of the new Queen.

### "By Command of The Queen"

I was in South Africa. I had no idea that I should see the Queen crowned. Sixteen years before, I had sat in Westminster Abbey and seen the Crown of St. Edward placed upon the head of King George VI, but it never occurred to me that I might have the luck to see that same crown placed upon the head of his daughter.

Then one day the telephone rang and a voice from Washington asked me to go to London on behalf of the National Geographic Society. I gladly agreed, and there came to me, as the representative of your Society and its Magazine, an important sheet of cardboard which measured ten and one-half by eight

and three-quarter inches. Upon it were these words:

By Command of The Queen  
the Earl Marshal is directed to invite  
Mr. H. V. Morton  
to be present at the Abbey Church of  
Westminster on the 2nd day of June 1953  
Norfolk  
Earl Marshal

I packed up and immediately left by air for London. The projectile in which I found myself, a Constellation, shot across the Continent of Africa at a height of 12,000 feet and descended only three times, at Nairobi, Khartoum, and Rome. Then it streaked across the frosted Alps like a hornet over a wedding cake and landed me in London within 26 hours of having left the Rand.

I walked out into London feeling stunned. I stood under a gray sky looking up at Nelson in Trafalgar Square, the dust I had collected in Khartoum still on my shoes. I thought what an incredible age we live in. I wondered

### The Author

Henry Volla Morton is admirably equipped to describe the new Queen's London. Now the author of many books on London, the British Isles, and Bible subjects, he made his name as a young reporter in Fleet Street with a highly entertaining newspaper column about London and its people. These columns have been published as a book and still sell briskly under the title *H. V. Morton's London*.

Among Mr. Morton's best-known books are the "In Search of" series, which began in 1927 with *In Search of England*. This was followed two years later with *In Search of Scotland*; others have since covered Ireland, Wales, and South Africa. The latest, published in 1951, is *In Search of London*. In the late 1930's Mr. Morton became interested in Biblical history; the result was a trilogy: *In the Steps of the Master*, *In the Steps of St. Paul*, and *Through Lands of the Bible*.

The author was born and educated in England, served with the Warwickshire Yeomanry in World War I, and now owns a grape farm in the Cape Province of South Africa. "But my heart," he says, "is still in London."





**Coronation Visitors Feed Pigeons and Dodge Spray in London's Trafalgar Square**

Red buses bring daily throngs to see the National Gallery (directly above) and famous old St. Martin-in-the-Fields (beyond the equestrian statue). Coronation banners deck the plaza, a favorite spot for public gatherings.





**Crossroads of the Royal Procession: the Queen Passed This Spot Three Times**

Hub of London, the square commemorates Lord Nelson's victory at Trafalgar in 1805. Bronze lions guard a granite column topped by his statue. Coronation press stands (in blue) await cameras and microphones.



what Livingstone or Mungo Park would have said could they have met a man in Trafalgar Square who a few hours before had been south of the Zambezi.

Then I took my travel-tortured limbs to bed and slept the clock round.

The sun was shining in the morning, and I had not been in London for three years. Only a Londoner, perhaps, can know how thrilled I was to be back, how exciting it was to look out and see the scarlet buses speeding through the silver grayness of the streets, the thousands of chimney pots, the gray church spires, the towers.

I loved every bit of it. I went out into the streets. I took taxis. I sat on the tops of omnibuses. I walked down the Mall, where Charles II used to play the mallet-and-ball game called pell-mell, and saw ahead of me the brown front of Buckingham Palace with the Queen's banner on top of it and the scarlet sentries below.

#### Breastplates Glitter as Guards Parade

Then I saw the Life Guards come jingling down Constitution Hill, their breastplates glittering, their plumes tossing, their black chargers lifting their heads with a jingle of burnished bits. As they drew level with the palace they slowed to a walk; the horsemen "carried swords" and swung their eyes to the right; and the palace sentries came to the salute with a slip-slap-bang and a slight puff of pipe clay.

A group of workmen stopped hammering at a Coronation stand and looked up to watch the Queen's Guard go past. It has not been called the Queen's Guard since Victoria died half a century ago.

I must tell you that when I left London three years ago life had touched exasperation point. Tempers, like everything else, were short. People were fed-up and browned off. They were also cynical. War was infinitely more exciting than victory, and privations in peacetime were harder to endure. Men reluctantly wore rationed reach-me-downs, and women looked unloved in utility garments; even the buildings wore their cloaks of soot with an air of sullen resentment.

That was what London was like, and I began to think that the famous "London pride" had gone forever.

But now—what a change, what a fantastic recovery! I saw smiles everywhere. A character rather like the now legendary man about town went jauntily along, a bowler (derby) on the side of his head and an umbrella hooked on his arm. He was not, maybe, as expensively smart as the men about town of other days, called beaux, mashers, and knuts in the slang of the time, but he was definitely

a Londoner. And he was everywhere. The bowler hat, the black coat, the tightly rolled umbrella were like a uniform.

Women looked happy, and Bond Street was elegant again. Every other motorcar wore a little Union Jack on its bonnet. The shops were full of everything the heart could desire, but at three to four times its old price.

From hundreds of billboards, from thousands of shop windows, one face gazed gravely at the crowds. It was the face of a beautiful young woman who wore a diamond tiara and a shimmering evening gown crossed by the blue ribbon of the Order of the Garter (page 311). So the Queen looked out on her London.

It is an ancient fiction of all courts that queens are always beautiful; but I can say, with my hand on my heart and my soul free from the sin of flattery, that Elizabeth II has emerged from her girlhood as a really beautiful and graceful woman. In her expression it is possible to catch an endearing look of her father and sometimes a fleeting resemblance to her wonderful grandmother, Queen Mary.

I found everyone talking about her—taxi drivers, bus conductors and conductoresses, people in the streets, in hotels, restaurants, and shops.

"How her dear father, God bless him, would love to 'ave seen her now she's such a lovely queen!" was the amazing comment of an old woman in a tobacco shop in Kensington.

It was the first time I had ever heard anyone suggest that a monarch might be expected to enjoy the sight of his successor occupying the throne! But I knew exactly what she meant, and no one would have been happier than that gallant, gentle, God-fearing father, King George VI, to have seen his daughter's triumph.

#### Why Elizabeth Is Queen of Hearts

I have described London's pride in the new Queen. Let me analyze it.

The English people are acutely aware that it was under the rule of queens that their greatest national triumphs were achieved. They remember with pride the age of Elizabeth I and of Victoria; and I think good Queen Anne should also be remembered, for she was the presiding if unattractive genius of a brilliant and splendid epoch.\*

And now, at the end of a long stretch of postwar depression, there suddenly swings into English history not some elderly masculine member of a royal family but a lovely young queen who is also the elder daughter

(Text continued on page 300)

\* See "The British Way," by Sir Evelyn Wrench, NATIONAL GEOGRAPHIC MAGAZINE, April, 1949.





### Wide-eyed Children Envy the Guard Standing Sentry at Buckingham Palace

What London visitor has not felt his blood surge on glimpsing the splash of scarlet against the sentry box at the royal palace?

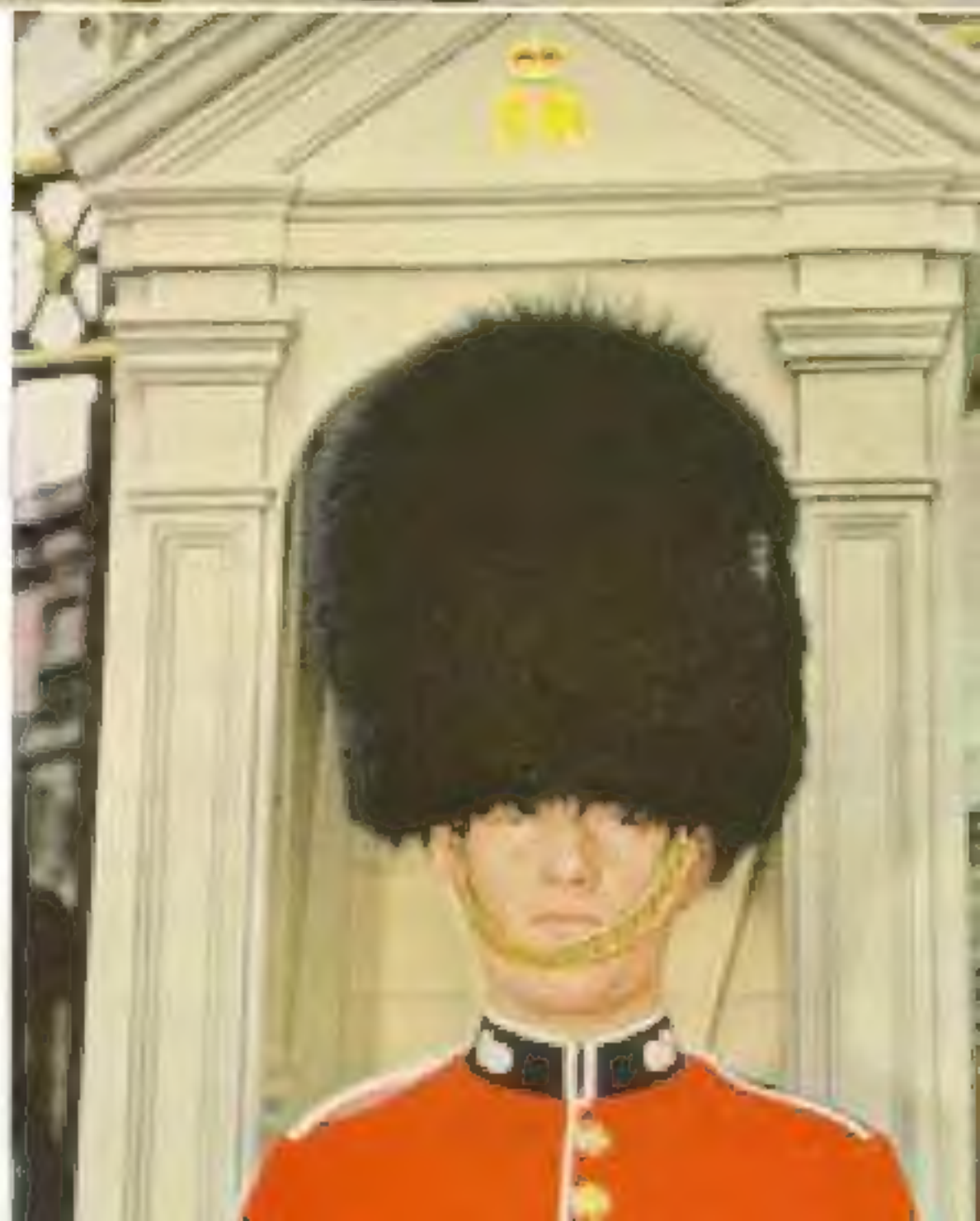
Behind the scenes, Scotland Yard protects Britain's Queen, but the Brigade of Guards, flower of the British Army, cherishes the tradition of maintaining vigil.

Fairy-tale splendor surrounds these toy soldiers-come-to-life in their old-fashioned uniforms of scarlet, gold, and blue and towering bearskin headdresses. Rigid as ice, they stare across the crowds and past the Queen Victoria Memorial.

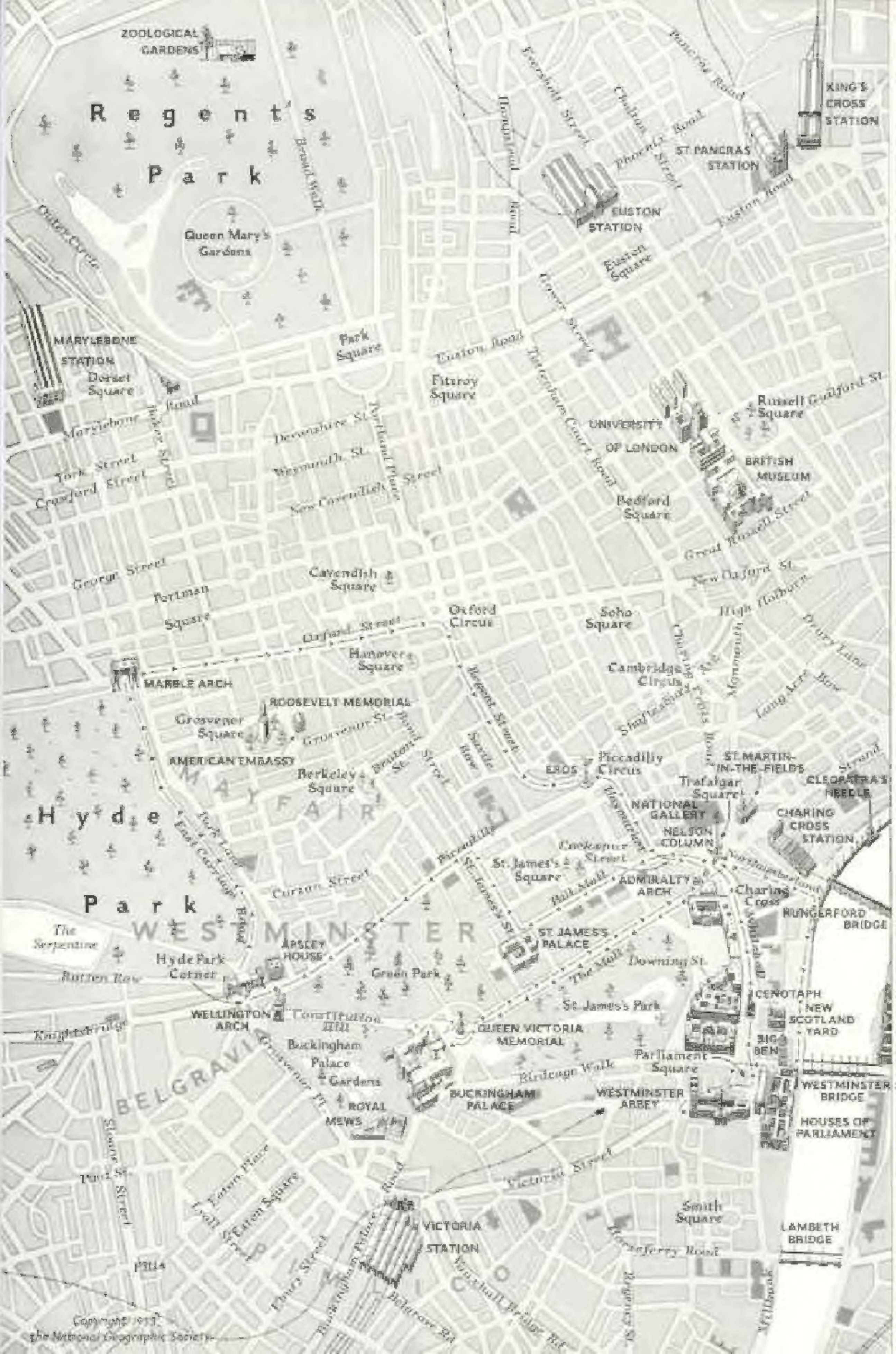
The changing of the guard delights a large audience every other day at 10:50 in the palace courtyard. There, against martial cadence of drum and fife, a new regiment takes over in a crash of stamping feet and a display of lead-soldier precision.

Red plume and eight-point collar star mark this sentry as one of the Coldstream Guards. A United States Air Force master sergeant stands behind the children.

→ A Grenadier Guard stands under the Queen's new cipher (monogram). Flaming grenade collar insignia and white helmet plume (barely visible) identify his regiment.







ZOOLOGICAL GARDENS

Regent's Park

Queen Mary's Gardens

MARYLEBONE STATION

Dorset Square

Marylebone Road

Turk Street

Crawford Street

George Street

Portman Square

Marble Arch

Grosvenor Square

AMERICAN EMBASSY

BERKELEY SQUARE

Hyde Park

WESTMINSTER

Hyde Park Corner

Wellington Arch

Constitution Hill

Buckingham Palace

Gardens

ROYAL Mews

Victoria Station

Marshall Street

Belgrave Road

Victoria Street

Smith Square

Lambeth Bridge

Westminster Bridge

Houses of Parliament

Big Ben

New Scotland Yard

Cenotaph

Park Square

Devonshire Street

Weymouth Street

New Cavendish Street

Cavendish Square

Oxford Circus

Soho Square

Cambridge Circus

Piccadilly Circus

St. James's Square

St. James's Palace

St. James's Park

Queen Victoria Memorial

Buckingham Palace

Parliament Square

Westminster Abbey

St. Martin-in-the-Fields

Trafalgar Square

National Gallery

Nelson Column

Admiralty Arch

Charing Cross

Ringerford Bridge

Charing Cross Station

Cleopatra's Needle

Long Acre

Whitehall

St. Martin-in-the-Fields

St. James's Square

St. James's Palace

University of London

Russell Square

British Museum

Great Russell Street

New Oxford Street

High Holborn

Monument

Shaftesbury Avenue

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St. Martin-in-the-Fields

Trafalgar Square

National Gallery









### A Gilded Cage in Piccadilly Circus Discourages Revelers from Sealing the Statue of Eros

The winged aluminum archer, preparing to bury a shaft in the ground, was originally a pun on the name of Lord Shaftesbury, the philanthropist whom he honors. Londoners call him Eros (Cupid), god of love (page 307).





### A Midday Lull Slows the Surge of Traffic Through London's Busiest Intersection

Restaurants and theaters cluster around this pleasure center, whose lights rival New York's. Underground stations here load and discharge 25,000,000 passengers a year. Central building splits Regent Street (left) from Glasshouse.





5077

1953

### King and Queen Return to Their Posts as Guardians of the City of London

London, 27.—The King and Queen, who visited London in 1937 as the royal guests of George VI and Mary II, have returned to their posts as the official guardians of the City of London. The King and Queen, who were crowned in 1953, have been in the City since 1953. The King and Queen, who were crowned in 1953, have been in the City since 1953.

of the King and Queen, who were crowned in 1953, have been in the City since 1953. The King and Queen, who were crowned in 1953, have been in the City since 1953.

A young man, who was crowned in 1953, has been in the City since 1953. The King and Queen, who were crowned in 1953, have been in the City since 1953.

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A young man, who was crowned in 1953, has been in the City since 1953. The King and Queen, who were crowned in 1953, have been in the City since 1953.

was crowned in 1953. She was crowned in 1953.

It was a very long time when the King and Queen were crowned in 1953. The King and Queen, who were crowned in 1953, have been in the City since 1953.

People proudly take in the King and Queen, who were crowned in 1953. The King and Queen, who were crowned in 1953, have been in the City since 1953.

People proudly take in the King and Queen, who were crowned in 1953. The King and Queen, who were crowned in 1953, have been in the City since 1953.





Wimbledon Feeds the New Southern with Roast Ostrich—In Ancient Times

$\mathcal{H}_2$  norm of the error signal  $\|e\|_2$  and the  $\mathcal{H}_2$  norm of the disturbance  $\|d\|_2$  are the  $\mathcal{H}_2$  norm of the transfer function  $\|G\|_2$  and the  $\mathcal{H}_2$  norm of the disturbance  $\|d\|_2$  respectively.

tell headlong through a door at the other end. When he emerged on the street, he saw that a fiery-looking fellow was waiting with a gun. "Get in the car," he said. "You were the last to see the fellow. This was the last time he was out and walking in the open air."

I wonder whether the supposedly strange and sinister stories which I have just told about the "murder" of the Jews and about the "green suit" for the Soviet Union must be in part due to the tales told of the "Jews" and "green suit" when the title-latter of the "Jews" was the talk of the town.

### A Tale of Young Prince Charles\*

For instance, close to the border, the Communist Party controlled much of the economy, and the people who had been in the area for five years or more, in November 1955, were the first to find out that they had been sold to the United States. The people of the province

There also were the same two sets of 100 in the shift systems in the Rensselaer County

governor they were ordered to leave the  
 Plains of Texas, finding there the same  
 conditions. He is said to have remarked  
 "You have taken away our soldiers and  
 now they can hardly be used for anything  
 left."

But after the paper is sent to the editor, And now I will tell you that the paper has not yet been sent for printing. I am sorry to hear that. I will send it to the printer as soon as possible. I will send it to the printer as soon as possible. I will send it to the printer as soon as possible.

100 | *Journal of Interpersonal Violence* 31(1)

With a few very trifling exceptions, however, the various parts of the *Phaenocarpa* resemble the *Hydrophilus* species, and the latter will be found to be a more correct name than the latter, which is commonly applied. I am, however, not very sanguine as to the propriety of the name, and I cannot but be aware in my description of some doubt will be cast upon it.

1901. May 15. From the station, 1000 ft. above sea level.







woman who is fated to go through history called "Bloody Mary," was the storm center of a religious revolution.

So perilous was life that it is a miracle Elizabeth I ever reached the throne. Even so, at first she could find no churchmen willing to crown her. Those archbishops and bishops not in the Tower called her a "heretic and a bastard" and boycotted the ceremony, and the ceremony itself, which was eventually celebrated, her is reported to have died of remorse within a year.

Mary II was never liked, and Anne, her sister, was welcomed as a pleasant change; but she was a "lady and going down in the boat" to be carried to Westminster Abbey—hardly an inspiring inauguration.

Even Victoria, so glorious in retrospect, came to the throne a young satiated girl, and many contemporaries wondered if she could stand the pace. Her coronation was called the "Penny Crowning" because it was done in the cheap, and even Disraeli, who became one of the glories of her reign, almost failed to attend it because he did not wish to spend money on a court dress or get up at 8 a.m.

Let the historian of the future note, therefore, that Elizabeth II is the first queen regnant in English history to be crowned with universal acclamation. And the reasons, apart from those of personal affection, are: because the Crown is no longer involved in politics or religion because since Victoria the Royal Family has presented an idealized picture of the domestic virtues, and because, after years of postwar depression the country feels that fate may have given it the break it so heartily desires.

#### London in Light-hearted Mood

During my first weeks I saw a great deal of London. I went to Buckingham Palace. I talked to the Lord Mayor of London. I had tea with the Chief Warden in the Tower of London. I went to Westminster Abbey, which was locked up but looked, as though heavens were building a dam inside it.

I had lunch in the House of Commons and sat afterwards on the Terrace watching the tugs go hunting up the Thames with their strings of barges like ducks with their chicks. I sat in the new House of Commons. I saw the Churchill Arch, the only part of the blitzed chamber that remains, an archway scarred and pitted by bomb and fire and preserved at the suggestion of the Prime Minister (page 309).

Sir Winston, sitting in the front row of the Government benches, was perceptibly older than when I crossed the Atlantic with him in 1941 to meet President Roosevelt off Newfoundland, the meeting that produced the At-

lantic Charter. He was wearing a hearing aid in his right ear. It must have been a good one, for he missed nothing; and I heard him rise up and demolish an opponent with a phrase.

I took hundreds of buses and taxis. I talked to everybody, and everybody talked to me. I got lost, as I always do, in the Underground.

And all the time I was thrilled to be in London again. It was so good to hear a bus conductor clumping up the iron steps to the upper deck, jingling the coins in his bag and shouting, "Heavy-to-re-fares-please"; to hear once again the incited but refined voice of a London telephone girl asking softly, "Ken aye help you?" And once, when I encountered a real old-time London taxi driver, and he, glancing at the tip I gave him, said in a rich, bery voice, "Best o' luck, guv'nor," my cup of happiness was nearly full. I was at home again.

It is my duty to you, unborn author of the future, to tell you that the London of the new Queen was suffering from high blood pressure. Before the bewildered gaze of visitors from every corner of the earth it was turning itself into a fairground. It was like watching some dignified elderly gentleman on a festive occasion putting on a false nose.

#### Capital Grows Bright with Bunting

As everyone is aware, London exists beneath a gray pall of suspended moisture. Sometimes it parts to reveal the sun, and then London appears—at least, to me—the most beautiful city on earth. And the gray days and the gold days followed one another while an army of workmen transformed a city that had only just emerged from mourning the late Queen Mary into a fantastic labyrinth of loyal avenues covered with flags and bunting.

The speed with which this happened surprised many people. An American woman, and to me—Back in the States we talk about the American know-how, but it seems to me that these Londoners have nothing to learn."

The Ministry of Works and the 28 Metropolitan Boroughs were determined that no lamp-post should go ungarlanded and that no vista should remain unimpeded if a few acres of assorted heraldry could block it up. I dislike decorations, especially in London, but some of them were quite good.

Whitehall, I thought, looked wonderful. Someone had had the brilliant idea of mounting enormous masts, two by two, down the center of the roadway, each one topped by a huge plumed helmet of gold. It looked, especially from Pall Mall Square, as if a squadron of gigantic Life Guards was trotting down to Westminster.



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• The Bradford Guild House 471-472, Victoria  
and Queen's Gardens Party.

As a result, the model is able to capture the nonlinear relationship between the variables. The model is also able to capture the non-normal distribution of the residuals. The model is also able to capture the heteroscedasticity of the residuals. The model is also able to capture the autocorrelation of the residuals. The model is also able to capture the multicollinearity of the variables. The model is also able to capture the overfitting of the model. The model is also able to capture the underfitting of the model. The model is also able to capture the bias of the model. The model is also able to capture the variance of the model. The model is also able to capture the mean of the model. The model is also able to capture the standard deviation of the model. The model is also able to capture the standard error of the model. The model is also able to capture the confidence interval of the model. The model is also able to capture the p-value of the model. The model is also able to capture the F-statistic of the model. The model is also able to capture the t-statistic of the model. The model is also able to capture the chi-square statistic of the model. The model is also able to capture the likelihood ratio statistic of the model. The model is also able to capture the Akaike information criterion of the model. The model is also able to capture the Bayesian information criterion of the model. The model is also able to capture the Schwarz information criterion of the model. The model is also able to capture the Hannan-Quinn information criterion of the model. The model is also able to capture the Akaike information criterion of the model. The model is also able to capture the Bayesian information criterion of the model. The model is also able to capture the Schwarz information criterion of the model. The model is also able to capture the Hannan-Quinn information criterion of the model.

a common illustration of the "broad" and "narrow" views of the  
 law. The "broad" view is that the law is a set of rules that  
 governs the behavior of individuals. The "narrow" view is that the  
 law is a set of rules that governs the behavior of the state.  
 The "broad" view is more common, but the "narrow" view is  
 also valid. The law is a set of rules that governs the behavior  
 of the state, and the state is a set of rules that governs the  
 behavior of individuals. The law is a set of rules that governs  
 the behavior of the state, and the state is a set of rules that  
 governs the behavior of individuals. The law is a set of rules  
 that governs the behavior of the state, and the state is a set  
 of rules that governs the behavior of individuals.

The second newspaper was the *Washington Post*, which had a reputation for being a somewhat liberal and independent news. A good idea was the *Magazine of the Nation*, a free radical magazine for radical and socialist views. The *Second Magazine* would take care of the socialist and socialist literature, but the paper was not a socialist newspaper, and it was the only one of the kind that was not a socialist newspaper.



The Puritans pulled the Maypole down as a relic of "vile heathenism," but the first thing London did when Charles II was restored to the throne was to put up an even bigger and better one in the same place; and there it remained until the 18th century. Still another was soon erected, and when it too was abandoned, Isaac Newton bought it as a support for an astronomical telescope.

Piccadilly was suffering from a species of monarchical measles. It was a rash of loyalty. All the travel offices had staged little shows in their windows. Pan American World Airways had reproduced the complete Coronation procession in lead soldiers. The French railways had pictured all the French princesses who became queens of England, and a Danish travel agency stressed the many historical links between England and Denmark. Indeed, I thought that an intelligent foreigner, just wandering along Piccadilly, could have taken a degree in history.

#### Piccadilly's Cupid in a Cage

The statue of Eros in Piccadilly Circus had been enclosed within an openwork gilded cage that, when lit up at night, was gayer than anything London has seen for years (page 298).

There was evidently a native in this coronation, for the cage was apparently undisturbed. Nevertheless, Eros was scaled on the night of Coronation Day by two revelers, one a seaman, the other a woodwork polisher, who succeeded in getting inside the cage. When they were charged at Bow Street police station with insulting behavior, the magistrate dismissed them with the comment that perhaps no one had been insulted except Eros.

It has been the custom of revelers since the Armistice repukings in 1918 to scale Eros on every festive occasion, much to the annoyance of the police.

Eros, as first created, was really just a statuesque pun. Its sculptor, Sir Alfred Gilbert, when commissioned to create a memorial to the seventh Lord Shaftesbury, after whom the near-by Shaftesbury Avenue is named, thought it would be appropriate to design the figure of an archer in the act of burying a shaft in the avenue. And that was at first the target at which the statue was aiming.

But officialdom, possibly disliking puns, in course of time turned the figure round so that the idea is now pointless. But London has taken to its heart this statue (by the way, the first large one ever to be cast in aluminum), has christened it "Eros," and has made it the presiding deity of West End gaiety.

Anyone who knew London 20 years ago would remember the apple-faced old women who used to sit around the base and sell gar-

denias and violets which in those days, and in their wars, were "lousy-ol' lets-a-geronig-a-bunch!"

But if you wanted to see the genuine downtown, it was necessary, as I told every stranger I met, to leave the official tributes of the West End and to explore the hundreds of little streets in East Ham, Stepney, Bermondsey, and any of the east or w other stern boroughs (page 302).

There you saw the real thing uninspired by officialdom. It was a London that almost defies description: whole streets hidden beneath flags and bunting, streamers from one little bedroom slung across the street to the bedroom of the house opposite, banners with "God Save our Queen" upon them, and a lot of the Queen and the Prince of Wales. It was in one of these humble districts that, during a Silver Jubilee drive years ago, George V and Queen Mary turned into a hellgated street and read above their heads, upon a banner slung across the road the words "Lousy but Loyal."

To any Coronation visitor it must have been obvious that he was seeing an abnormal London, a city that had gone gay for the first time in many years and was trying to forget its problems. These problems are the result of the war and a social revolution.

Generally speaking, the man in the street is better off than he has ever been, while the professional and middle classes have taken a big step downward. I met a friend who was once well off with an income of £4,000 (\$11,200) a year. He is now impoverished. He has divided his house into three flats, in one of which he lives himself, and he has given up his car and other luxuries to keep three children at the kind of school he thinks right and proper for a gentleman's children.

Another man who owned some property had handed it over as a gift to his tenants. He could not legally turn them out; neither could he raise their rent, nor could he pay for the repairs. He had been losing about £200 (\$500) a year on this house and was regarded into the bargain as a bloated plutocrat.

#### Housing Short Despite Rebuilding

Housing is one of the greatest problems in the London of the new Queen. The authorities have called a halt to the outward expansion of London. The London County Council, the governing body of the 117 square miles of the County of London, is working with its neighbors on 20-year plans of development; the hope is that many Londoners will find homes and work in new and expanding towns outside the "green belt" and 25 to 100 miles from the center of London.

They told me at County Hall (which, by





104 Broom 7

## Yeomen of the Guard Keep the Ravens in London Tower

THE YEOMEN OF THE GUARD, who protect the Tower of London, have a special duty to perform. During the night they keep the ravens in the Tower. These birds are said to be the only ones in the world that can fly back to the Tower if they are ever released.

It was when I first saw the Yeomen of the Guard that I knew they were different from any other men I had ever seen. They were tall, strong, and had a certain air of authority about them. They were dressed in their traditional uniforms, which were very different from the modern uniforms of the British Army.

The result of this heritage is that the Yeomen of the Guard are very different from the other men of the Tower. They are very different from the other men of the Tower in many ways. They are very different from the other men of the Tower in their appearance, in their behavior, and in their way of life.

It was when I first saw the Yeomen of the Guard that I knew they were different from any other men I had ever seen. They were tall, strong, and had a certain air of authority about them. They were dressed in their traditional uniforms, which were very different from the modern uniforms of the British Army.

I was at the Tower of London, in St. James's

which used to make them for the last 24 years. I was there when the old Yeomen of the Guard were still in the Tower.

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## Birdies and Cockroaches: New Style

Two things are happening in London which are important to the modern man. One is the virtual disappearance of the old-fashioned London house, and the other is that the new style of living is becoming more and more popular. These changes are making London a very different place from what it was in the past.

One of the most important changes is the disappearance of the old-fashioned London house. These houses were once the pride of the London streets, but they are now being replaced by new houses which are very different from the old ones. The new houses are much smaller, and they are much more modern in design.

It is not only the houses which are changing, but the way of life is also changing. The old-fashioned way of life is disappearing, and the new way of life is becoming more and more popular. This is a very important change, and it is one which will have a great effect on the future of London.

The night when I was in London, I was driven by a young man. We came into the city, and I saw the old-fashioned houses which were still in the city. I was very interested in these houses, and I was very interested in the way of life which was still in the city.







"It's all my fault!" he cried miserably. "I should have sent them away to safety, but I couldn't bring myself to do it. I couldn't think that the City of London should be without Gog and Magog, its guardians!"

And now the great moment had arrived when, in readiness for the Queen's state visit to the City, two new giants had been installed. They are the work of Mr. David Evans, the sculptor, and are beautifully carved limewood figures 9 feet 3 inches in height (page 300).

They are grotesque and fierce, as giants ought to be; yet I found that the staff of the Guildhall preferred the more uncouth old oak figures. Londoners are like that. I, personally, thought the new giants a great improvement on the old ones.

### A Chat with the Lord Mayor

Walking down Cheapside, I presented myself at the Mansion House.

I was shown by a footman into a vast drawing room whose Georgian pilasters and cornices were picked out in gold. The Lord Mayor, who is a Member of Parliament, a businessman, and a farmer, came briskly in, wearing the usual black coat and striped trousers of a City man. He was interested to know that I was writing for the *National Geographic Magazine*, which he reads and enjoys.

We discussed his part in the forthcoming Coronation. His robes are of scarlet and ermine (page 312). He drives to the Coronation in state accompanied by his sword and mace-bearers. His heavy coach, which has no springs, is drawn by a team of powerful gray horses.

"All I have to do," he said, "is to stand near the Throne among the heralds and hold the Crystal Scepter of the City, which, by the way," he added, "I hope I shall not drop!"

This scepter, often called the "Crystal Mace," is an object of unknown age which some authorities think may be Saxon. It is 18 inches long the shaft of twisted crystal mounted in gold. It is used only at coronations and on extremely rare occasions.

Passing to modern London, the Lord Mayor told me that of the City's 393 acres of buildings 104 were totally destroyed by bombing. Nearly £7,000,000 (\$19,600,000) of rebuilding has been completed, with but little effect on the appearance of the City. Another £15,000,000 (\$42,000,000) has been approved by the City Corporation, but the work has been held up by pressing priorities.

The sight of so many bombed sites in the City is surprising so many years after the war and is in marked contrast with other parts of London, notably the West End.

The City of the new Queen will eventually

be a less crowded and a better planned place, but no skyscrapers are to be built. St. Paul's is to be surrounded by gardens so that the Cathedral may stand out as Wren, the architect, intended it to do, uncluttered by neighboring buildings.

The problem of reconstructing a crowded area like the City, of reconciling town planning with private property rights, and of providing adequate parking space is a complex one. During a recent census it was discovered that 5,600 cars are parked every day on bomb-damaged sites. The new buildings are to have underground garages, and some, in crowded lanes, will be given electrically driven turntables that will enable cars to drive in, turn round, and get away.

While we were talking, the Lord Mayor's valet came in carrying the scarlet Coronation robes, which Sir Rupert put on. It was at this moment that I noticed the improbable figure of an American sergeant, in uniform standing beside a Corinthian column, holding a fishing rod! The scene was one that reminded me of Lewis Carroll or maybe Salvador Dali.

"Yes, he's there all right," said the Lord Mayor, "and his name is Sgt. Maynard E. Huser. He has come over for the Coronation bringing me a fishing rod made of span glass, with the compliments of the Governor of Michigan and the Mayor and citizens of Kalamazoo."

In this pleasing atmosphere of fantasy I said good-bye.

### "Marder" at the Tower of London

I walked along to the Tower of London to look up my old friend, Mr. Cook, the Chief Warden. I found him in his office a few yards from the site of the beheading's block on Tower Green. The new partisans, or pikes, carried by the beheadingers had just arrived, leaving the new oval cipher, ER.

"How do you like it?" asked Mr. Cook, handing me the head of a partisan.

"Very nice," I replied.

"Well I'm not so sure," he said, his head on one side. "I think the E is too upright and well, too masculine!"

Hang on the wall was a document which can have no equal in any guardroom on earth. It is headed "Ravens."

As all the world knows, these birds have been kept in the Tower of London for centuries. They hop clumsily and often angrily about Tower Green, croaking at the Tower cats and at visitors (page 308).

This document was their official roll and conduct sheet. It gave the name of each bird, its number, and its military career. It

(Text continued on page 310)





A Quarter of Earth's People Hail Elizabeth II as Queen. Among Them Philip Her Husband  
 A quarter of the world's population hail Elizabeth II as queen. Her husband, Prince Philip, Duke of Edinburgh, is seen here with her in 1952, when she was crowned.





In Coronation Robe, the Lord Mayor of London Sits for His National Geographic Portrait  
 Sir Philip Sassoon, a Member of Parliament, is shown in the above portrait. He is the Lord Mayor of London for the year 1905-1906. The portrait was taken by the photographer, Mr. J. J. Brown, of the London Press and Photo Co., Ltd., London.





### Five O'clock in the Morning: Total and Fully Ready Dress for Coronation Day

The dress is a white, long-sleeved, high-necked, floor-length gown with a full skirt. It is made of a light-colored fabric, possibly silk or satin, and features a subtle pattern. The dress is shown in a full-length view, highlighting its elegant and formal design.





Glad to See You When You Are Here. A Series of Removable Photographs of the Company  
 at the Hotel. The first of the series is a group of the company. The second is a group of the  
 company. The third is a group of the company. The fourth is a group of the company. The fifth is a group of the company. The sixth is a group of the company. The seventh is a group of the company. The eighth is a group of the company. The ninth is a group of the company. The tenth is a group of the company. The eleventh is a group of the company. The twelfth is a group of the company. The thirteenth is a group of the company. The fourteenth is a group of the company. The fifteenth is a group of the company. The sixteenth is a group of the company. The seventeenth is a group of the company. The eighteenth is a group of the company. The nineteenth is a group of the company. The twentieth is a group of the company. The twenty-first is a group of the company. The twenty-second is a group of the company. The twenty-third is a group of the company. The twenty-fourth is a group of the company. The twenty-fifth is a group of the company. The twenty-sixth is a group of the company. The twenty-seventh is a group of the company. The twenty-eighth is a group of the company. The twenty-ninth is a group of the company. The thirtieth is a group of the company. The thirty-first is a group of the company. The thirty-second is a group of the company. The thirty-third is a group of the company. The thirty-fourth is a group of the company. The thirty-fifth is a group of the company. The thirty-sixth is a group of the company. The thirty-seventh is a group of the company. The thirty-eighth is a group of the company. The thirty-ninth is a group of the company. The fortieth is a group of the company. The forty-first is a group of the company. The forty-second is a group of the company. The forty-third is a group of the company. The forty-fourth is a group of the company. The forty-fifth is a group of the company. The forty-sixth is a group of the company. The forty-seventh is a group of the company. The forty-eighth is a group of the company. The forty-ninth is a group of the company. The fiftieth is a group of the company. The fifty-first is a group of the company. The fifty-second is a group of the company. The fifty-third is a group of the company. The fifty-fourth is a group of the company. The fifty-fifth is a group of the company. The fifty-sixth is a group of the company. The fifty-seventh is a group of the company. The fifty-eighth is a group of the company. The fifty-ninth is a group of the company. The sixtieth is a group of the company. The sixty-first is a group of the company. The sixty-second is a group of the company. The sixty-third is a group of the company. The sixty-fourth is a group of the company. The sixty-fifth is a group of the company. The sixty-sixth is a group of the company. The sixty-seventh is a group of the company. The sixty-eighth is a group of the company. The sixty-ninth is a group of the company. The seventieth is a group of the company. The seventy-first is a group of the company. The seventy-second is a group of the company. The seventy-third is a group of the company. The seventy-fourth is a group of the company. The seventy-fifth is a group of the company. The seventy-sixth is a group of the company. The seventy-seventh is a group of the company. The seventy-eighth is a group of the company. The seventy-ninth is a group of the company. The eightieth is a group of the company. The eighty-first is a group of the company. The eighty-second is a group of the company. The eighty-third is a group of the company. The eighty-fourth is a group of the company. The eighty-fifth is a group of the company. The eighty-sixth is a group of the company. The eighty-seventh is a group of the company. The eighty-eighth is a group of the company. The eighty-ninth is a group of the company. The ninetieth is a group of the company. The ninety-first is a group of the company. The ninety-second is a group of the company. The ninety-third is a group of the company. The ninety-fourth is a group of the company. The ninety-fifth is a group of the company. The ninety-sixth is a group of the company. The ninety-seventh is a group of the company. The ninety-eighth is a group of the company. The ninety-ninth is a group of the company. The hundredth is a group of the company.



2. The *Journal of the American Medical Association* has been the most influential of the medical journals in the United States. It has been the most influential of the medical journals in the United States. It has been the most influential of the medical journals in the United States.

Table 1. *Continued*









The Queen and her ladies-in-waiting were seated in the room for the pictures. The Queen and her ladies-in-waiting were seated in the room for the pictures. The Queen and her ladies-in-waiting were seated in the room for the pictures.







# The Archbishop Places the Crown on the Head of the Supreme Minister of the Government

The Archbishop of Canterbury, the highest ecclesiastical authority in England, is shown here placing the crown on the head of the Supreme Minister of the Government, the Prime Minister, during a formal ceremony. The ceremony is held in the presence of the King and the Queen, and the Archbishop of Canterbury, the highest ecclesiastical authority in England, is shown here placing the crown on the head of the Supreme Minister of the Government, the Prime Minister, during a formal ceremony.





The Drama of a Pageant Centuries Old Reaches Its Climax in the Abbey

For the first time, a new edition of *Mathematical Statistics* is published, together with a new section on the theory of estimation. The new edition of *Mathematical Statistics* is published in the United Kingdom by the Cambridge University Press, 100 Brook Hill Drive, West Nyack, New York 10994-2173, U.S.A. and by the Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU, U.K. and by the Cambridge University Press, 477 Williamstown Road, Port Melbourne, Victoria 3207, Australia. The new edition of *Mathematical Statistics* is published in the United States of America by the Cambridge University Press, 32 Avenue of the Americas, New York, New York 10013-2473, U.S.A. and by the Cambridge University Press, 100 Brook Hill Drive, West Nyack, New York 10994-2173, U.S.A. and by the Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU, U.K. and by the Cambridge University Press, 477 Williamstown Road, Port Melbourne, Victoria 3207, Australia.





### Elizabeth Is Crowned. Streets Ring the Abbey: "God Save the Queen."

After triumphantly entering the Abbey, the queen, attended by her ladies-in-waiting, took the throne of state, and the ceremony of her coronation was performed. The streets of London were filled with people, and the bells of the city were rung in honor of the new queen.





### The Archbishop Addresses His Queen, "God Crown You With . . . Glory!"

Just on the eve of the Archbishop's departure for the Holy Land, he was seen in the foreground of a grand ceremony. The Archbishop, in his white robes, is kneeling and addressing the children of the Holy Land, who are kneeling in front of him. The Archbishop is wearing a white robe with a red sash and a mitre. The children are wearing white dresses with red sashes. The background shows two other men in white robes and mitres standing near a red curtain.







# Edward Takes Possession of the Kingdom After Peers of the Realm Symbolically Led Her to the Throne

The coronation of Edward the Confessor in 1066 was a landmark event in English history. It was the first time that a king was crowned in the presence of the entire nobility of the kingdom. The ceremony took place in Westminster Abbey, and it was there that Edward was crowned King of the English. The coronation was a symbol of the king's power and authority, and it was a time when the king was seen as the representative of God on earth.

At the coronation, Edward was crowned with a golden crown, and he was anointed with oil. The ceremony was a grand affair, and it was attended by many of the nobles of the kingdom. The coronation was a symbol of the king's power and authority, and it was a time when the king was seen as the representative of God on earth.





# St. Edward's Crown Is Worn Only at Coronations

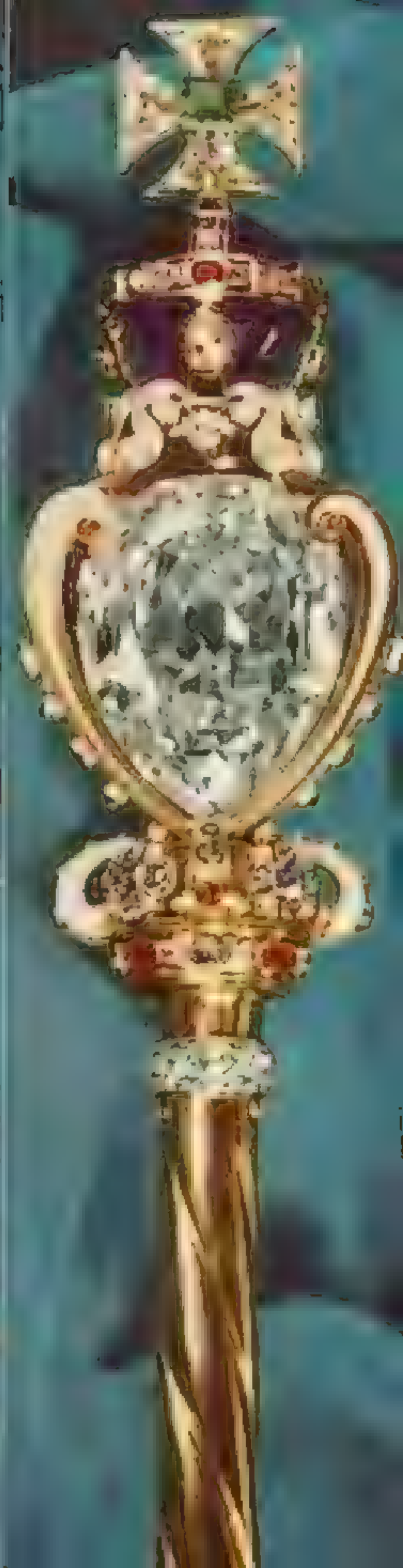
Named for Edward the Confessor, St. Edward's Crown was first made by the goldsmiths of the House of Goldsmiths in London in 1269. It was made for the coronation of Edward I. The crown was made of gold and set with pearls and jewels. It was first used at the coronation of Edward I in 1274. The crown was used at the coronation of Edward II in 1308. The crown was used at the coronation of Edward III in 1344. The crown was used at the coronation of Richard II in 1377. The crown was used at the coronation of Henry IV in 1399. The crown was used at the coronation of Henry V in 1418. The crown was used at the coronation of Henry VI in 1454. The crown was used at the coronation of Edward IV in 1461. The crown was used at the coronation of Richard III in 1483. The crown was used at the coronation of Henry VII in 1485. The crown was used at the coronation of Henry VIII in 1501. The crown was used at the coronation of Edward VI in 1547. The crown was used at the coronation of Mary II in 1689. The crown was used at the coronation of George III in 1760. The crown was used at the coronation of George IV in 1821. The crown was used at the coronation of William IV in 1831. The crown was used at the coronation of Victoria in 1838. The crown was used at the coronation of Edward VII in 1902. The crown was used at the coronation of George VI in 1937. The crown was used at the coronation of Elizabeth II in 1953. The crown was used at the coronation of Charles III in 1953.



## London Tower's Treasures: the Royal Regalia Glitter with Gold and Jewels →

The crown jewels of the United Kingdom are the most famous and valuable of the country's treasures. They are the symbols of the monarchy and are used at the coronation of the monarch. The crown jewels are made of gold and set with pearls and jewels. They are the most valuable of the country's treasures and are the most famous of the country's treasures. The crown jewels are the most famous and valuable of the country's treasures. They are the symbols of the monarchy and are used at the coronation of the monarch. The crown jewels are made of gold and set with pearls and jewels. They are the most valuable of the country's treasures and are the most famous of the country's treasures.







# A King's Heirloom James Lewis Presents the Crown of State

THE CROWN OF STATE, the most precious of the jewels of the British Crown, is now on display in the Victoria and Albert Museum. It is the only one of its kind in the world, and is the most valuable of the jewels of the British Crown. It is the only one of its kind in the world, and is the most valuable of the jewels of the British Crown. It is the only one of its kind in the world, and is the most valuable of the jewels of the British Crown.



## Seal and Orb in Hand, Elizabeth Leaves the Abbey

Queen Elizabeth I, the first of the Tudor dynasty, is shown in the illustration. She is wearing a red velvet cap and a gold band with pearls and diamonds. She is holding a seal and an orb in her hands. The illustration is a woodcut, and it is the only one of its kind in the world. It is the most valuable of the jewels of the British Crown. It is the only one of its kind in the world, and is the most valuable of the jewels of the British Crown.













## Royal Front Guards March Up Whitchurch Road During Post-Training Speeches & Banquet

For a more complete understanding of the factors that influence the success of a business, it is important to consider the role of the entrepreneur. The entrepreneur is the person who starts and manages a business. They are responsible for identifying opportunities, securing resources, and making decisions that will determine the success or failure of the business. The entrepreneur's role is crucial in the early stages of a business, as they are the ones who bring the vision to life and make the initial decisions that shape the company's future.



began with Nigger, who "died of shock during the 1940 air raids, aged 18 years." Then came Mabel, who "disappeared mysteriously August 1940," and Grip, who also "disappeared mysteriously, September 1940."

"What happened to them?" I asked.

"We never found a feather," replied Mr. Cook.

The next entry concerned Pauline, who died from injuries caused by Mabel and by Grip." Short and Towerlike was the comment on the fate of a bird named MacDonald—"found murdered."

The present ravens are six in number and have been named Corn, Corax, Gann, Garvie, Charles, and Cronk.

I learned that the Beefeaters were having revolver practice in preparation for their all-night vigil on the eve of the Coronation, when they have to guard the Crown Jewels in the Jerusalem Chamber of Westminster Abbey. I smiled to imagine these Tudor figures armed with Colts. Mr. Cook told me that the idea of arming them with submachine guns had been abandoned in view of the possibility that, should anything happen, the Beefeaters might shoot up the Crown Jewels by mistake!

#### Toppers and Turbans at the Palace

As the day of the Coronation approached, I received an invitation to a garden party at Buckingham Palace. This meant a visit to Moss Bros., the firm of outfitters known everywhere in London as "Moss Bros." They can, at a moment's notice, dress a duke or a field marshal or turn you out, complete with court sword, looking like a character in a comedy by Sheridan. They told me that within a week of King George VI's death all their peers' robes had been booked.

That a peer should hire his robes is not necessarily a sign of insolvency. When the first Elizabeth was queen there were about 50 temporal peers; now there are about 800, most of them business or professional men. These costly robes are essential only at a coronation, and it is obviously much more sensible to hire than to buy them.

In a day or so I strolled into the wide wings of Buckingham Palace wearing a gray Ascot topper and a well-cut morning coat. I suppose hundreds of my fellow guests had drawn their splendor from the same source.

The scene was a remarkable one. The lawns were crowded with several thousand people from every part of the world. They wore every imaginable costume. I saw African chiefs walking beneath their state umbrellas; Burmese princesses; Indian women in yellow, silver, and magenta saris; gentlemen in glittering turbans and gold trousers; and I felt that there must be quite a lot of

the Empire still left (page 306). A guards band played in a marquee; tents and pavilions stood ready to provide the guests with tea, cakes, and ice cream.

The ritual of a palace party is always the same. Those guests who are to be presented to the Queen are segregated by the Lord Chamberlain. The rest stand round and rubberneck. Suddenly every top hat is doffed, a band plays the anthem, and the Queen is standing on the lawn, the Duke of Edinburgh beside her.

They walk slowly round, and, as they pass, the men lift their hats, the women curtsy. The guests are shameless in their curiosity, some even stand on chairs to get a better view.

When the royal party has retired to its marquee, there is a polite but tough fight for tea and cakes in the other pavilions. The band plays Gilbert and Sullivan. Photographers mounted on the palace roof with enormous Big Bertha lenses take long shots of the guests, for no camera is allowed on lawn level.

After about two hours of polite strolling to and fro, a long line is formed, the Queen passes back to the palace, and the party is over.

While this was going on, I was hunting for a mulberry tree. I have it on the best authority that one mulberry tree still remains in the palace gardens, a relic of those planted there in 1609 by James I in an abortive attempt to create an English silk industry. But on the rare occasions when I have been in this garden I have failed to find it, and I failed again.

That was how Buckingham Palace began; a mulberry garden that soon degenerated into a kind of roadhouse where the gallants of the time of Charles II used to take their lady friends to eat mulberry pie. Pepys called it "a very silly place."

Though I failed to find the tree, I came across a sight that might have been seen in any suburban garden. It was a children's sand pit from which obviously Prince Charles and his sister had been whisked off to the nursery before the party began. Like all children, they had found an old wooden kitchen spoon, which lay stuck in the sand just as they had left it after making sand pies with the half of a large Easter egg.

#### London Learns Atom-bomb Defense

As a contrast to these exalted moments, I changed my gay attire and went that night to Hammersmith with a friend who lectures to members of the Civil Defense Corps on the atom bomb. It is interesting to know that while, to the superficial observer London





Spectators Paid Up to \$150 for Choice Seats Like These in Pull Mall Stands

Three hundred people are expected to attend the performance of the new opera, "The Girl of the Year," at the Pull Mall stands. The seats are sold for \$150 each.



seemed incapable of any other thought than the Coronation, 33,000 Londoners meet all over the London area once a week to study how to save the lives of their fellow citizens in the event of war.

We entered a room in which a number of men and women—ordinary shopkeepers, artisans, and housewives—were studying instruments leased by the Home Office to detect the presence of radioactive dust. They were all keen and interested. I was told that some of them were old air-raid warners. I thought that to attend these classes in practice proved them to possess the highest possible sense of civic responsibility.

I was so interested by this sidelight on London's real activities that I went to the Home Office and found that they were not satisfied with their 33,000 air-raid volunteers and were thinking of a recruiting drive to obtain at least 100,000. The secret War Room of London's Civil Defense is standing ready to be manned at a moment's notice.

I was taken with a group of visiting generals to see the War Room, but I am not permitted to say where it is. I can say, however, that it is far underground. We went through acres of air-conditioned corridors into a complete rabbit warren of rooms all ready with telephones and teleprinters.

The War Room itself contained three large maps of the London area on which enormous disks, used for practice, denoted the devastation caused by atom bombs. This room had a complete link-up with all Civil Defense organizations, with the Army and the RAF, the police, hospitals, and other relevant bodies, and could, I was told, be in action with 33 local authorities in the London area within 24 hours.

### Outdoor Dining Where Bombs Fell

I have indicated that in the past three years London has pulled itself together in a notable manner. It has definitely entered a new era. I saw around me many new signs of the times. For instance, London is now full of little restaurants run mostly by Cypriotes, Greeks, or Italians, and these are no longer confined to Soho. They are an indication that in these servapless days the Londoner, whenever he can afford to do so, eats out.

On the London sites, especially in the City, I saw many little continental cafes where typists and City folk can eat beneath gay striped umbrellas which blazon the moment the sun shines. The sight of Londoners dining out of doors is a novelty.

I had the delightful experience of being shown by an American visitor something I had never seen in London, although it has been in existence for 15 years. This was the Derry

Roof Garden atop one of Kensington's largest department stores. I doubt whether the Hanging Gardens of Babylon were as beautiful or as utilitarian.

Here, 100 feet above London, are an acre and a half of flower beds, 20-foot-high trees and flowering shrubs, with running water full of goldfish and Japanese carp, and lakes on which ornamental ducks are swimming. There are a Moorish Garden, a Tudor Garden, and an Old English Garden, all planted in two feet of soil that is changed once in 12 months. There is nothing to remind the visitor of his position on the roof of London but the close companionship of neighboring church spires.

### Duke Gives Mansion, Lives in Attic

I thought the museums and art galleries of London were better than ever, and I was delighted to solve what has been a mystery to everyone of my generation. The Duke of Wellington's summer mansion, Apsley House, at Hyde Park Corner, known as No. 1, London, has for years been one of the enigmas of London. It was always closed and apparently lifeless. Now it has been presented to the nation and is open to the public.

Its presentation was unusual, and a special act of Parliament was passed before the nation acquiesced it. By the terms of this act, the present Duke of Wellington gave the mansion and its contents to the nation on the condition that he and his descendants should occupy a flat rent free in the attic!

So the splendors of Apsley House, beautifully restored by the Ministry of Works, are visible to anyone who pays a shilling, while His Grace lives upstairs in quarters once occupied by the family servants.

The house is one of the finest sights of modern London. Its ground-floor rooms are full of the massive and costly treasures showered upon the Iron Duke by a grateful Europe; upstairs is to be seen the famous Waterloo Gallery with the enormous table at which Wellington entertained his generals at dinner on the anniversary of Waterloo.

It is just a century since the Iron Duke died, and perhaps no more illuminating commentary exists anywhere on our changing world than this spacious mansion with its suites of superb rooms and galleries, which were the usual background to a duke's life around 1833, and the flat in the attic now occupied by the duke of 1953.

And now I come to the Coronation. I acquired two curious little sidelights on this great occasion. While I was admiring the splendid royal gray horses which were to pull the golden coach through the streets of London I asked the superintendent of the Royal

(Text continued on page 339)





### The Young Queen and Her Prince in a Gilded Coach Seize on Their Admirers

The young Scotch coach proprietors, who, holding the license to carry royal mail, are the only ones who are allowed to carry the royal mail, are the only ones who are allowed to carry the royal mail. The young Scotch coach proprietors, who, holding the license to carry royal mail, are the only ones who are allowed to carry the royal mail. The young Scotch coach proprietors, who, holding the license to carry royal mail, are the only ones who are allowed to carry the royal mail.





### Royal Canadian Mounted Police Reach Parade Route's End at Victoria Memorial Circle

Criminals and their ilk were chased through London with 10,000 police in formation. Guards with curved rifles, black breeches and tunics, and Mounted Police in red serge and black hats with broad-brimmed hats, and drums.

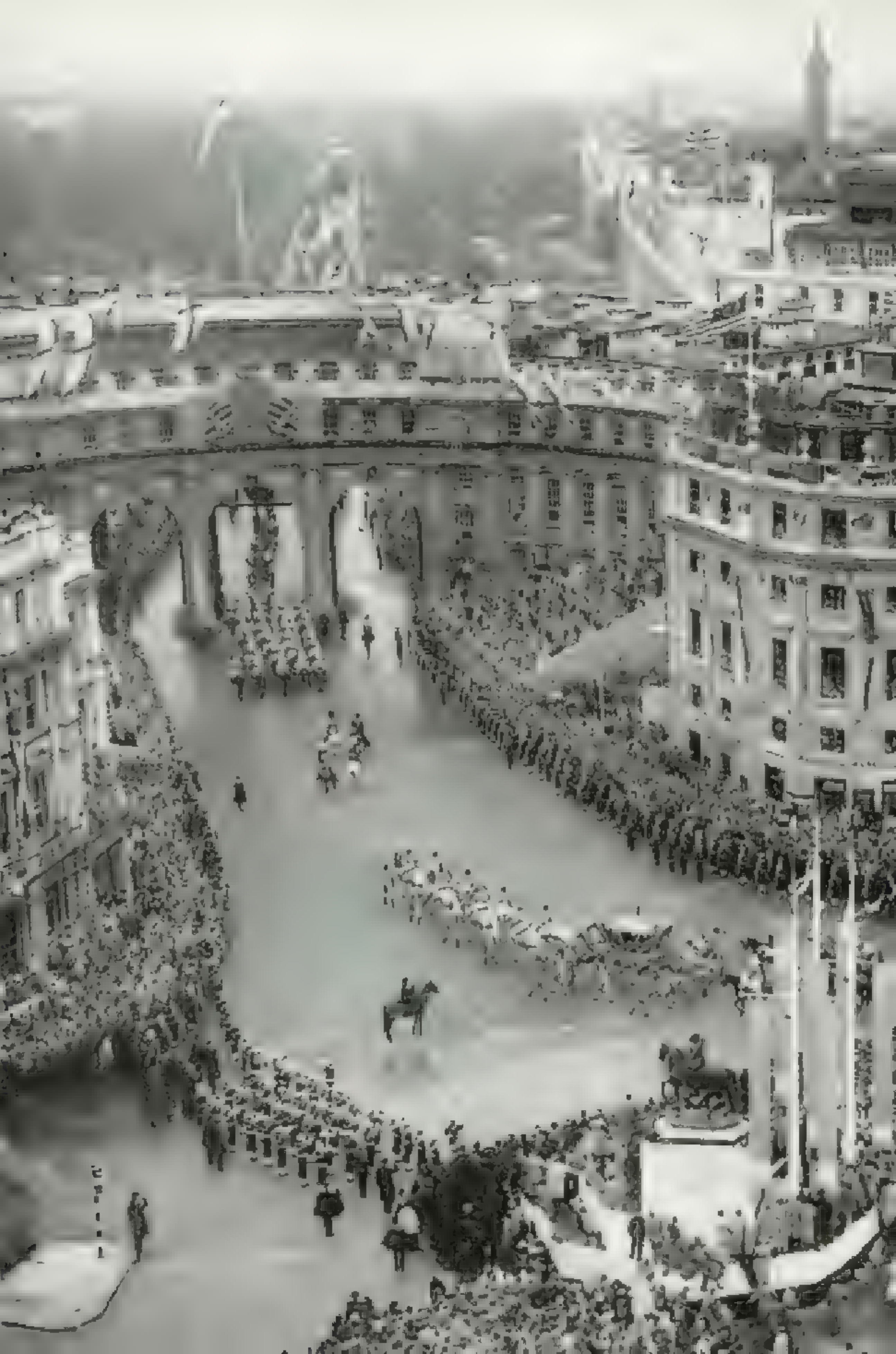




# Mounties' Criticism Times Match Those of the Brigade at Camps During the Fall

More than 1,000 troops took part in the parade. They included spring-mounted as well as heavy teams drawn from the army. Many were directed to a certain extent to viewing the parade and to the other people.









### The Queen in Her Golden Coach Begins the Last Day of a Triumphant Tour

London, Sept. 25.—The Queen's tour of the United Kingdom, which began on Sept. 1, is now in its last day. The Queen, accompanied by the Duke of York and the Duchess of York, will leave London for the Continent tomorrow morning. The Queen's tour has been a great success, and she has been everywhere welcomed with enthusiasm. The Queen's tour has been a great success, and she has been everywhere welcomed with enthusiasm. The Queen's tour has been a great success, and she has been everywhere welcomed with enthusiasm.







Mews to tell me their names. I found that the offside whorler is called Eisenhower! His companion is Cunningham. The other six are: Tovey, Snow White, Noah, Tippetary, Tedder, and McCreery. For a day these were the most celebrated animals in the world.

#### Holy Oil Saved for Generations

My second inquiry concerned the holy oil with which the Queen is anointed. It is the act of unction, not the act of crowning, which is the essential feature of a coronation. The anxiety of early kings was not to be crowned, but to be anointed by the Church, and until the sixteenth century never did they succeed in to be sure. In the Middle Ages men talked of the "hallowing" or the "oiling" of the monarch, not of his coronation.

I heard that the consecrated oil is kept from one coronation to another. Victoria reigned for so long that the surplus oil from her anointing had become granulated by the time of her death. A new supply was therefore made for Edward VII, and this served also for George V. New oil was made for George VI, and this supply would have been used to anoint the present Queen if it had not been destroyed when the Denner of Westminster Abbey, in which it was kept, was burnt out during the air raids.

The maker of the oil for this Coronation, I learned, was Mr. J. D. Jamieson, who is connected with a well-known firm of Bond Street chemists. The ancient recipe came into his keeping from Sir Peter Wyatt Squire, whose ancestor made the oil for the coronation of Queen Victoria.

There is considerable mystery about this recipe, which Mr. Jamieson has now lodged for safety in the muniments room of Westminster Abbey. He told me that he made the oil last November on Sundays when the dispensary in Bond Street was empty. As a preparation, he gave up smoking for a month in order to increase his sense of smell, for since the first Elizabeth complained that the oil was "musty grease and smelt ill," it has apparently been highly scented.

#### \* The Queen's Coach Rode Across Parliament's Wet Shadow

Two miles of men and girth, horses and carriages, uniforms and decorations stretch ahead as Elizabeth leaves the Abbey (around the corner at right) to greet the expectant multitudes. Here we pass Parliament's Victoria Tower, scaffolding for refurbishing. Postillions steer white riding horses of the eight Windsor grays; no coachman could safely manage the 24-horse, four-ton carriage. Walking grooms accompanying each horse carry crooks to lift up traces when turning corners. Yeomen of the Guard (on right) wear embellished hats, doublets, and ruffs. The stands are filled with potables.

The formula is a secret, and Mr. Jamieson said: "The recipe made all the textbooks on solubles look extremely foolish. It was real hard work. The formula is almost the same as that used for the anointing of Charles I, but I am not allowed to divulge it."

He did tell me, however, that it includes the oils of orange flowers, of roses, cinnamon, jasmine, and sesame, with benzoin, musk, civet, and ambergris. It has a rich and peculiar smell, is amber colored when freshly made, but turns reddish with time, and the scent improves with age.

#### Rain Fails to Dampen Loyalty

When the great day arrived, I rose at 5 a.m., dressed, and found my way to Westminster Abbey. It had been raining most of the night, a malarious wind whipped round the street corners, and it was chilly enough for snow. I had never known the weather to behave with such disloyalty to the British monarchy. I felt sorry for the crowds who had spent the night in the streets (page 303), and for those who had come at great expense from distant countries, to encounter this depressing morning. But the excitement and expectation of the crowds were such that even the rain was soon forgotten.

A blind man could have told that the early-morning streets were filled with thousands of people. Above the sound of gents and car engines came from every direction the hum of crowds.

The Abbey was transformed by blue hangings and floodlit carpets. I was shown to my seat by a colonel in full-dress uniform, scarlet tunic, tight overalls, and box spurs; and I wondered where I had seen him before. Then it occurred to me that he might have been Sir Arthur Sitwell, the doctor who was practically a celluloid representation of a dandy that is lost and most noble in English life, and who was always "playing the game" and not letting down the side.

Then I realized that the Abbey was full of Aubrey Smiths, both young and old. They clanked about in spurs, holding swords in kid-gloved hands; they stole noiselessly about the church in black satin or velvet knee breeches and court dress, rapiers slanting from their coat-tails. How efficiently the Earl Marshal had sacked the military messes of Aldershot and the clubs of the West End to discover so many British types who, as Gold Stick officers, or ushers, marshaled a gathering as brilliant, as dazzling, and as British as themselves.

Why, I wondered, does a peeress wearing long white kid gloves almost to her shoulders a tiara on her head, and her ruby-colored ermine robes trailing on the carpet look so







1. **Introduction**  
 2. **Background**  
 3. **Methodology**  
 4. **Results**  
 5. **Conclusion**  
 6. **References**

[illegible]

C, mol/l	P, %
0.001	10
0.002	100
0.004	100
0.006	10
0.008	10
0.01	10
0.012	10
0.014	10
0.016	80
0.018	10
0.02	10



exquisite, while her husband in his regalia appears faintly comic?

I gazed at the princess in amazement. It hardly seemed possible that these superbly poised creatures had ever washed up a wash or made a bed, while the peers, who sat opposite in the south transept, looked as though death duties had never been known and each one possessed an enormous estate, a crowd of loyal tenants, and a vast house designed by the Adam brothers.

Could it be possible, I asked myself, that these magnificent persons were the men who for the past 30 years have been giving away their houses to the National Trust?

Women in full evening dress at 6:30 a.m. are never at their best, or perhaps at their sweetest, but they carried it off wonderfully, and only their decorative husbands knew what had really been said at the dressing table at 4 or 5 o'clock that morning!

### Great Abbey Fills with Splendor

Gradually the whole church filled with professors and ambassadors, with admirals and generals, with vicars and rulers of every hue. Upon a blood-red acre of gold carpet before the altar the Earl Marshal and the Great Officers of State moved, trailing clouds of glory, while every now and then the heralds—looking remarkably like the officers from a pack of cards—appeared in their quartered tabards turned inwards, and bowed as they showed some member of the Royal Family into the royal box. And all the time a great orchestra mounted on the organ loft filled the church with the splendid solemnities of Handel.

At last came the moment which must have touched the heart even of a cynic. All alone in the solitude of a great destiny stood a young woman in a white dress beneath the floodlights on the golden carpet. From hidden vantage points in concealed boxes television and film cameras were at work. The Queen of England was standing before the whole world (pages 314-327).

No man, I thought, at such a moment could have behaved with such composure. Her bearing was a credit to all queens and to all women. And as I saw her I confess that my heart melted and I knew that I was in the presence not only of the daughter of George VI and our "undoubted Queen" but of Victoria, Anne, Elizabeth I, Mary Tudor, of Great Harry himself, of the splendid Plantagenets and of the far-off Normans.

When the trumpets split the air in triumph, they seemed to open the gates of the past and to fill the church with crowned and sceptered ghosts, each one with the word "England" on its lips. I wondered if she were conscious of them. They were all round her, watching her with grave faces and experienced eyes.

Hidden by the tapestries and the hangings and concealed by tiers of boxes were the tombs of her remote ancestors. Behind the altar was the grave of Edward the Confessor, who died nearly 900 years ago. Round him in a circle were Henry III, who built the present Abbey Church, Edward I and Edward III, those great warriors; and Richard II, who lies there with Anne of Bohemia, the wife he loved to distraction.

How strange it was, I thought, that one young woman in a white dress standing before the altar of Westminster Abbey could symbolize 900 years of a nation's history, its successes and its failures, its aspirations and its dreams.

I saw a slow wave of gold brocade sweep up and surround her as the archbishops and the bishops led her to the Coronation Chair. A golden canopy hid her from view as she was signed with consecrated oil upon the hands, the breast, and the head, and became from that moment "the anointed of God." I saw them dress her as if she were a Byzantine saint on an icon, until she sat wreathed down with golden vestments, the Rod in one hand and the Scepter in the other. In the head of the Scepter the Great Star of Africa, cut from the Cullinan diamond, writhed with fire and sent out flashes of blue and red light every second like a lighthouse.

### Bells, Voices, Guns Salute the Queen

Then the Crown of St. Edward I was lifted high and placed upon her head, and instantly a great cry went out to God to bless her, the bells of Westminster began to ring, and far off in the Tower of London the guns fired a salute. Elizabeth II had been crowned.

I watched her husband kneel before her and swear homage in the exact formula used in the days of chivalry. She sat stiffly, her hands held together, the fingers extended. He placed his hands within hers and swore to be true and loyal to her all his life. And the stiff, glittering man who was his Queen, his wife, and the mother of his children, looked back at him gravely and saw his bent fair head without a smile. Then, rising, he quickly touched the crown and bent forward and kissed her on the cheek.

Hours afterwards I stood in a wet street outside the Abbey and watched her pass in the golden coach, the Crown upon her head, the Scepter and the Orb in her hands. I felt as one feels for a bride at a wedding, only this bride had been married in England. All the church bells were ringing, and so the new Queen drove out into London.

Members who wish additional copies of the issue containing this notable record of London and the Coronation for themselves or their friends may obtain them from the National Geographic Society, Washington 6, D. C., as long as the limited supply lasts. Prices in the United States, U. S. Possessions, and Canada 65¢ each; elsewhere 75¢. Postage prepaid.



## Southeastern Arizona Keeps the Dudes Happy with Cowboy Styles, Cactus Forests, Ghost Towns, and Live Indians

By MASON SUTHERLAND

*Assistant Editor, National Geographic Magazine*

I FLEW out to Tucson to investigate southeastern Arizona: its climate, cotton, copper, and cattle. My observations on the climate—it was a short-sleeve day in February—were interrupted by a burst of gunfire.

Tombstone's Vigilantes were shooting up the streets of Tucson. Disguised in black beards and armed with six shooters, the visitors were advertising the Fiesta de los Vaqueros, Tucson's annual rodeo. Firing fusillades of blank cartridges, they enacted the shooting of Waco Bill, an old-time desperado (page 353).

Next day every man, woman, boy, and girl who could scare up a horse rode in the rodeo parade. Others stood on sidewalks or scaled rooftops to watch (page 351). Mayor and sheriff shared honors in the procession with hogus Black Bart the bandit and Geronimo, the outlaw Apache. Real cowboys and Indians vied with Air Force and high school bands. Cannon dancers flourished skirts aboard a float, and burros pulled covered wagons. But the most popular figure, I judged by the small boys' applause, was Hopalong Cassidy in person!

So many visitors—5 to 10 thousand—were in town that every hotel, motor court, and guest ranch was packed.

Nearly every man and boy on the streets was dressed as a Wild West character. Those who resisted the style risked public exposure in the Junior Chamber of Commerce's mobile lockup, the Court of Injustice, whose attendant Vigilantes made merry by firing paper bullets at one another's hats (page 344).

### A Style Revolt in the Desert

Even store-window dummies, which the week before wore evening clothes, blossomed out in the western look. One maid of plaster roped her man amid bales of hay in a glassed-in barnyard.

I saw two women, one in sun suit, the other in fur jacket, escorted by a man in gambler's-stripe suit (page 352).

That dude in polished yellow boots came out of Boston a week ago. Had he been a cowboy, his boots would have been scuffed. The "casual" rumple in his 10-gallon hat was steamed in.

Tucson uses wearing apparel to manifest its independent spirit. A party hostess specifying formal dress is lucky to get a third of the men in tuxedos; the others arrive in blue

jeans, frontier pants, or plain business suits.

I watched concert-goers variously attired in white tie and tails, tuxedos and black ties, tropic whites, and blue denims. Feet were stuffed into shoes, boots, or moccasins.

Women's standard house dresses are definitely out. Fashion favors the squaw dress, the smart seamstress' modification of Navajo apparel, which the modern Indian girl scorns.

Go to any square dance and you will see squaw dresses ballooning out with centrifugal force. Heavy belts flash with polished silver.

Visiting Porter's, a specialty store, I had as guide a saleswoman clad in boots, frontier pants with wide front pockets, and a shirt fastened with cowboy's snap-on buttons. She wore a little vaquero string tie.

### Houses Wear Desert Colors

Inspecting a leather shop, the Kaihah Buckskin, I found Hopi Indians making Navajo moccasins, here called squaw boots, a popular style with both men and women. Thick and heelless rawhide soles, quickly conforming to the shape of the feet, give the sensation of walking barefoot without running the risk of upended tails.

Similarly, Tucson revolts against architectural styles which do not fit the desert scenery. Newer banks discard the Greek-temple style. Decorated with water colors and potted plants, their interiors look like fashion shops.

The typical Tucson country house is a long rambler without basement or attic. Walls of burned-adobe bricks may be paneled with wood painted in desert colors—paloverde green, sunset pink, or the alkali gray of a cowman's hat. The ceiling may reveal a layer of prickly stems from the wotlika, a desert plant. Floors are cemented to discourage termites, a surprising scourge of this arid country. Strings of dried red peppers hang beside fireplaces built into corners.

Big picture windows look out upon mountains on every side. In the yards barrel cacti lean southward like inverted compass needles to catch the most sun (page 354). Feathery leaves of paloverde trees brush against windows, their branches remaining green to absorb the sunlight. Scarlet tips of ocotillos dance in breezes, and salt cedars trail gossamer evergreen needles. Most dramatic of all, droopy-armed saguaros stand in penguin postures.









### Land of Cactus, Cotton, Copper, and Cattle—Southeastern Arizona

Here Tucson grows the five-and-ten—dudes pick cactus them—out of their breeches, and the sun shines all winter. Natural beauty, old towns, and miles of river blend into mountain and desert scenery.

During the war I left Wyoming in a blizzard and next day found Tucson basking under a warm sun. I found I could swim in winter instead of freezing. Like many another soldier, I said, 'This is the climate for me!'

'At first I found the desert as harsh and repellent as bare granite. Saguaro and ocotillo looked as incredible as plants on the moon. How could I know that in spring they would put out delicate blossoms! In winter the desert was as stern and masculine as a mail-clad warrior. Blooming, it turned into a frilly little girl with a lei around her neck.

'And so, without realizing it, I was exposed to something like an insulin drug. I grew to like the place. Today the feel of the desert, the look of the mountains are closer to me than anything in the world. The desert is my peace and solace. An ice of sand and solitude, it is as wild and unpredictable as the sea. Sometimes I get the feeling of trespassing. If I leave the place

for three months, the desert rushes back like a tropic jungle to reclaim its own. Scorpions and black widow spiders take over. I think, basically, that man will always be an alien here. Oddly, that's part of the fascination.'

### Dudes Enjoy Blizzards Back Home

Tucson's climate has been described as 'ten months of summer and two months of no winter.' Intense sunshine is the city's great fortune in winter, its misfortune in summer. The sun shines nearly every day of the year.

To enjoy a Tucson winter to the hilt, I recommend sitting in the patio of a guest ranch and talking about the winter weather back home. Guests at the Westward Look ranch, where I stayed, bragged about our home towns' blizzards and secretly, I believe, wished our stay-at-home friends some of them. We forgot the world's troubles; few of us read a paper or heard a newscast. Getting a February mailer seemed more important





346

### Tucson, Once an Adobe-walled Village, Grows Out-of-bounds in All Directions

... the city is growing so fast that it is now a traffic jam. Bulldozers dig a traffic way out of a valley as through town.

Meeting is a common scene of the developed American feeling. Some of the guests were politicians, others were stock market artists. It made no difference at within hours we were talking one another by car at the time.

Some of the Arizona has some 75 guest ranches, every one of them boasting a string of horses. (page 143-144)

"Some of our guests are allergic to horses," said Robert M. Nelson, the host. "Our veterinarians are removed from the main house so they won't have to look at the animals."

Low rent, cattle ranches, but most of the owners are retired business people who have gone west for their health. Some of them never make a dime. They are happy if they can break even.

Next to the ranches and farms, Tucson has the most beautiful view of the city in the

or heavy transportation and very little of Arizona's previous water. Both the Grand Central Aircraft Company, which modifies bombers, and Hughes Aircraft Company, which designs and manufactures electronic equipment, work for the United States Air Force. (page 144, 145)

### Big Bombers Fly Out of Tucson

At Strategic Air Command's Davis-Monthan Air Force Base the 15th Air Force keeps B-29's and B-47's alerted for war.

"Essentially this is not a training base," in order to do this we are training all the time. Our mission is to keep these big bombers in readiness. Should war be declared tomorrow, our planes could refuel themselves enroute within a short time. They are waiting to knock out the enemy war





187

U.S. AIR FORCE PHOTO

Visitors on "A" Mountain Look Past the Business District into the Santa Catalina-Santa Cruz River, whose water runs through Tucson. Town at the foot of the river. On its banks Father Kino built the mission that has named the city since Tucson.

ing his land with his factories and oil fields."

Rehearsing against that day, Gen. Curtis E. LeMay's\* Tucson flyers have been making mock bombing runs on places as far away as Minneapolis. Recently the base has added more refueling planes, KB-29's and KC-97's.

Today many of the base's operations are geared to the aerial-refueling process. Planes on simulated combat missions gulp gasoline in refueling "bow-string" lines that lead to beyond Davis-Monthan's range.

### Old Town Wall Has Crumbled

Southern Arizona was acquired by the United States in 1853 with the Gadsden Purchase from Mexico. Tucson, which earlier was the Old Pueblo, came wrapped in an adobe package, the mud wall surrounding the town. Behind the wall lived mostly Mexicans,

some Indians and American adventurers.

Tucson's Spanish flavor survives and Indians still walk along its streets, but a man of the 1800's would not recognize the place.

If you stand at Congress Street and Stone Avenue, you will see the newer ingredients of the Tucson brew, descendants of the pioneers, artists with beards, New Yorkers in Cadillacs, college kids in hot rods.

Cartwrights and cowboys work the old life in the desert; scrapers open dirt roads overnight; but almost nothing remains of the town wall that protected the Old Pueblo against the Indians. Only a crumbling three-foot mound of dirt on the Courthouse lawn survives from that barricade.

\* See "Air Force School for Survival" by Gen. Curtis E. LeMay, *National Geographic Magazine*, May, 1957.



# University of Arizona Men Select Their Desert Queen

by the men of the University of Arizona, who, after a long and arduous search, have selected their Desert Queen. The name of the winner is Miss Mary Ann Miller.

Miss Miller, who is a student in the University of Arizona, was selected by the men of the University of Arizona, who, after a long and arduous search, have selected their Desert Queen. The name of the winner is Miss Mary Ann Miller.

## Mechanical Packets Attack a Cotton Field

A new method of attacking the cotton field has been discovered by a group of men at the University of Arizona. The new method is called "Mechanical Packets" and is a new way of attacking the cotton field.

The new method is called "Mechanical Packets" and is a new way of attacking the cotton field. It is a new way of attacking the cotton field and is called "Mechanical Packets".









To see the walled city as it looked, I visited Old Tucson, an unpeopled urban park erected as a movie set and now preserved as "an exact replica of Tucson in the 1800's."

Visitors thronged the mock jail, and husbands stuck their heads through the mesquite bars for giggling wives to photograph. Old Tucson's town well had no water; the saloon was just as dry. The corral had no horses; the church, no priest. Boothill's graves were strictly phony.

### San Xavier, a Living Mission

Mission San Xavier del Bar, Tucson's best preserved landmark, stands a few miles from town on San Xavier Indian Reservation. Father Eusebio Francisco Kino, Jesuit missionary and explorer, established it two and a half centuries ago as one of a chain of missions from northern Sonora, Mexico, to southern Arizona (pages 380, 381).

Father Celestine Chien, O.F.M., the padre in charge, pointed out that Spanish Franciscan missionaries had built the present church between 1783 and 1797. From 1827 when the Franciscans left San Xavier, until 1859, when Tucson was in American hands, the mission lay neglected. Sections have been repaired, most recently replicas of 10 original columns have been installed on the facade.

Surveying that facade, the eye naturally follows two lines spiraling up toward a plaster cat and mouse, the pair staring at each other with enduring suspicion.

"May they long continue to do so," says Father Celestine, "for the Indians say, 'When cat catches mouse, end of world will come.'"

The interior reveals the touch of primitive Indian artisans. Each pilaster appears to have had its patterns applied by bare thumbs dipped in blue vegetable dye. Since the architects liked formal balance, they painted false doors opposite real ones.

Molded on the walls, brown Indian cherubs float above their white counterparts, suggesting that the padres consoled persecuted Indians with visions of equality in Heaven. Statues of the apostles stand in niches. One vacancy tacitly calls attention to Judas, the traitor.

### Hermit Artist Builds Own Mission

I found one Tucson resident building his own mission. He was Ettore de Grazia, an artist who takes pleasure in wearing scuffed boots, miner's rough clothes, battered Na-

vajo hat, and full-blown beard (page 380).

Mr. De Grazia, who would like to be a hermit, confesses he hates civilization. He allows no running water in his home, but compromises with electricity. It took his wife two years to coax a vacuum cleaner out of him.

Tucson, which once regarded De Grazia as eccentric, now takes notice because he has become successful. Art buyers beat a path to his door; his ceramics are catching on, and a fabrics manufacturer pays him a cent-a-yard royalty for each sale of skirt material decorated with the artist's dancing Indians.

And now De Grazia has undertaken his "one-man dream," the construction of a "ruined" mission in the Santa Catalina Mountains, where he is five miles from telephone, gas, and electricity. He hauls materials into the mountains in a battered old model A. Its radiator freezes, tires blow out, and people ask, "Why do you do it?"

"We have lost the flavor of the West," he replies. "We are becoming an imitation of the East. In my mission I intend to dream of what the country used to be like. The mission will have no functional purpose. It will be a place of beauty where I can go and hide. It will be built to look like a ruin because I love ruins."

### Meat Deliveries by Horsecar

Rosemary Deanman Taylor, author of *Chicken Every Sunday*, told me how her father in 1903 had built his home so far out in the desert that he had no neighbors.

"In those days," she said, "the University of Arizona stood even farther out in the brush. City and school were linked by canopy-topped horsecars running past our door."

"I can remember when Mother, having forgotten to buy meat, called up the butcher and asked him to give her order to the horsecar driver. The driver appeared half an hour later, his passengers famishing because he had stopped to deliver our lamb chops. Then, whipping his old crowhairs, a horse and a mule, he drove into the desert."

"Today Tucson has not only swallowed us but the university too. The last trolley has gone; only a few rails are left."

The University of Arizona, opened in 1891, has a total enrollment of 10,000, including men and women students from 28 foreign countries. Old Main, the first building, still stands in the center of the landscaped \$3-





Tucson, Ariz., Tuesday, Sept. 24, 1913. (Left) Standard Oil Co. (Right) Rich Oil Co.

### Tucson Revives Pioneer Days with a Rodeo Parade Down Stone Avenue

Work done in the city during the past few days for Belmont's Fiesta de los Vaqueros, a celebration in honor of the city's pioneer days, was completed today with the parade of the Santa Catalina Mission and the rodeo.





APRIL 1934

342

#### A Cowboy Hats Bloom in Vivid Colors

Part of a large display of cowboy hats, some of which are made of straw, are shown in this photo. The hats are arranged in rows, showing various colors like blue, green, yellow, and red.

#### Bears Complete the Buckskin Chieft

Moore, 1934, and 1935, are the only bears in the world. The bears are shown in this photo, along with a large display of cowboy hats.







### Moon, Music, Campfire and Giant Cactus Make the Desert Night Romantic

At the foot of a giant saguaro cactus, a group of people are gathered around a large campfire, enjoying the romantic desert night. The scene is illuminated by the warm glow of the fire and the cool light of the moon.



# Spring Part the Desert Valley: Rabbits, Finches, and a Sagehen Forest

Spring is a time when the desert valley is a place of life and growth. The rabbits, finches, and sagehen forest are all part of this vibrant scene. The rabbits are seen in the brush, the finches are in the trees, and the sagehen forest is a beautiful sight. The spring is a time when the desert valley is a place of life and growth. The rabbits, finches, and sagehen forest are all part of this vibrant scene. The rabbits are seen in the brush, the finches are in the trees, and the sagehen forest is a beautiful sight.

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A Tombstone, Once a Roaring Mining Camp, Reveals Its Yesterdays in the Old Bird Cage Theater, Now a Museum

The old gold mine camp of Tombstone, Ariz., has been turned into a museum, and the old Bird Cage Theater, which was built in 1884, has been converted into a playhouse. The old mine camp, which was once a famous mining center, has been turned into a museum, and the old Bird Cage Theater, which was built in 1884, has been converted into a playhouse.

357



DAN DOWD  
RED SAMPLE  
TEX HOWARD  
BILL DILANEY  
DAN KELLY  
LEGALLY  
HANGED  
MAR. 8 1884







358

#### \* Indian Turquoise, Heavy and Decorative, Stands Out Like Old Egyptian Gold

Colorful and heavy Indian turquoise stands out like old Egyptian gold in the modernized world. It is the most popular of the new decorative materials. The turquoise is used in a variety of ways, from jewelry to home decoration.

#### \* Artists Stencil Designs on Fabrics by the Sublimation Process

Artists and fabric designers are using the sublimation process to create new designs on fabrics. This process allows for the creation of vibrant, long-lasting patterns on a variety of materials, including cotton, silk, and polyester.





new campus; 55 handsome structures have sprung up around it (page 348).

The university's faculty claims a number of distinguished men, but perhaps the most celebrated is Dr. A. E. Douglass, discoverer of the tree-ring method of dating Indian ruins.\* One day he took me touring close to the snowy summit of 9,188-foot Lemmon Mountain, Tucson summer colony and one of his favorite tree-hunting grounds.

When close to the ski lodge, Dr. Douglass assembled his Swedish bore, which extracts a solid core, and took samples from 16-inch pine and 500-year-old Douglas fir.

An astronomer by education, Dr. Douglass became interested in trees when he found that the varying thicknesses of their annual growth rings not only reflect years of heavy and light rainfall but also significantly resemble certain cycles related to the 11-year cycle through which sunspots wax and wane.

Starting with rings of modern trees whose dates are known, and matching them with rings of older trees of unknown date, Dr. Douglass has established climate conditions in the southwestern pueblo area back as far as A. D. 11 and has dated prehistoric ruins by their timbers (page 363).

Now, using his tree rings, he believes it will become possible to forecast certain climatic changes. "But we need more local data," he says. "There are so many complexities, so many variations in different parts of the world."

#### "We Still Fight for Water"

To understand the background of another of the four C's—cotton—I saw a scientist at the university's College of Agriculture.

"Though Arizona is noted for its mines," he told me, "its farms do even better. The production score for 1952 was: mining, \$225 million; agriculture, \$416 million.

Illustrating cotton's westward march Arizona grew 948,000 bales in the 1952-53 crop season. The value of that crop outweighed the money return from cattle \$193 million to \$85 million—and this is a celebrated cattle country. The average yield, 682 pounds to the acre, was the highest of any State in the country. Pima County picked 1.50 bales to the acre, or more than twice the national average (page 348).

"In Arizona the issue is water," my informant continued, "and we still fight for it. The old sheep and cattlemen did it with guns

Now people go to courts and lawmaking bodies. Our case with California over the Colorado River's waters is now pending before the U. S. Supreme Court.

"Cotton, as you know, is a thirsty crop requiring torrents of water. Where is the water coming from? The basic story is this: We have enough water to farm 700,000 acres indefinitely. Today we are trying to till 1,000,000. In certain areas water for these extra acres is being drawn out of the ground more rapidly than it is being replaced." †

#### Colonel Greene's Cattle Empire

For the sight of cattle,‡ I toured southeast Arizona with Charles W. Herbert, president of Western Ways, a Tucson studio whose photographs illustrate this article. During our 1,500-mile trip the face of Arizona changed dramatically.

One February day we drove across bone-dry cholla wastelands where scrawny cows barely scratched a living and, just over a rise, we entered lush valleys where cattle grew fat.

Entering a waving sea of grass, the Santa Cruz Valley, we found true cow country, with tremendous ranches and registered herds. There Mr. Herbert and I were guests of the Greene Cattle Company's 25,000-acre San Rafael Ranch, founded by the late Col. William Greene, owner of one of the continent's greatest cattle empires.

"I know of no area in the Southwest so well suited to Herefords as this valley," G. Marshall Hattman, the ranch manager, told me. "No area south of Kansas has so heavy a soil.

"Our cattle, always in the open, do not suffer in winter, as they do in the North. Cows calve from January to April, three months ahead of northern cattle. Survivals average 90 percent. We have no fever ticks, no Bang's disease, no tuberculosis. One ranch hand can do the work of many here. Our main drawback is the lack of spring moisture, our big rains coming in July and August."

Touring San Rafael Ranch in a pickup truck, we drove across trailless pastures. Fields of native grama grass stretched as far as the eye could see. New calves had tails

\* See "Secret of the Southwest Solved by Talkative Tree Rings," by Andrew E. Lent Douglass, NATIONAL GEOGRAPHIC MAGAZINE, December, 1927.

† See "Water for the World's Growing Needs," by Herbert R. Nichols and F. Barton Colton, NATIONAL GEOGRAPHIC MAGAZINE, August, 1962.

‡ See "America's Meat on the Hoof," by William H. Nicholas, NATIONAL GEOGRAPHIC MAGAZINE, January, 1962.



painted pink to tell riders that they had been counted. On every road we found old crooked gullies dammed to catch every drop of rain that fell and spread it across the green pastureland.

The pursuit of fortune underground has fascinated Arizona men since the days of Coronado, who journeyed across the State in quest of the fabulous Seven Golden Cities of Cibola. Gold and silver poured out of the first bonanzas. Then high-grade copper lured prospectors to tunnel the cliffs and honeycomb the ground.

Today the quest is for low-grade copper, an ore that didn't interest the old-timers. New discoveries, new machinery, and new capital have made profitable the extraction of ore containing less than one percent copper. Arizona, with half a dozen huge open-pit mines, is the leading copper State.

### Jail and Hospital Crumble

The graduate mining engineer with bulldozer and power shovel has largely replaced the bearded prospector with burro and packax, but the latter left his indelible mark on the country. Mountainsides along many a trail remain scarred with abandoned shafts, rusting ore cars and decaying beam frames. Legends of lost gold mines are a dime a dozen. Any turn in the road may reveal a ghost town.

Detouring down one dirt road, Herbert and I visited Gleeson, a ghost camp that recently tried to make a comeback. Three automobiles sat on the dusty main street. But Gleeson's adobe buildings were crumbling back into the earth from which they came. The jail had tumbled in; the 8-room schoolhouse had been quarried for stone. Grass grew in a roofless, abandoned hospital, and a general store stood empty.

Steve Pryor, Gleeson's most articulate resident, informed us:

"Ten years ago my doctor told me to quit business and lead the quiet life. I couldn't have found a quieter place."

A few miles past Gleeson, once-flourishing Courtland lay abandoned behind a locked gate. We found the only resident camping in a large and dusty block of stores.

When we asked him how long Courtland had been deserted he glowered and replied, "It ain't deserted; I'm still here, ain't I?"

Leaving Courtland, we passed by Pearce, semi-ghost town, whose mines in eight boom-

ing years shipped out silver and gold valued at six million dollars. At that time, to frustrate outlaws, miners freighted out gold bullion in bars too heavy for robbers to carry away.

### They Mined Silver, Fought Apaches

Close to Arivaca, Herbert and I visited one of the last of the Arizona silver mines. The Mary G, a four-man operation, gave us a glimpse into the romance of mining.

E. V. Chester, "60 years old and a miner as long as I can remember," told us the history of the mine, whose tantalizing hole enriched and baffled men before he was born.

"The poorest ore down there," he asserted, "will assay \$200 a ton and some of the highest grade, \$2,000. The Mary G had already grossed \$200,000 to \$300,000 in silver when flooding at the 100-foot level closed the mine. Now the falling water table [the curse of Arizona farmers] has made operations possible at 200 feet.

"This mine must have been worked as long ago as Spanish times. You can almost date it by the miners' antique 'chicken' ladders.

"Those old fellows messed up the ground with a maze of tunnels. We sank \$14,000 into the old pit before undermining forced us to abandon it. Now we're digging a new shaft, hoping to tunnel over to the old level.

"All we have to lose is our investment. Think of the old-timers who worked the Mary G in Apache times! They used to mine a bit, then fight a bit. I can see them, sticking their heads out of the ground to sight Apaches."

Like so many of his predecessors, Mr. Chester abandoned the Mary G a few months later.

### A \$70-million Hole in the Ground

To learn the story of copper, we toured the Morenci open pit and smelter, the Nation's second largest copper operation, surpassed only by the Bingham Canyon mine in Utah. Morenci stands above U. S. Highway 666, near the Coronado trail, where the Spanish explorer, who had eyes only for gold, passed by a fortune in copper.

Millions of tons of waste rock dumped into canyons gave us a dramatic introduction to Morenci, a town of 6,500 people. Here the Phelps Dodge Corporation, having turned a mountain into a hole in the ground at a cost of \$70 million including plant and facilities, produces up to 250,000,000 pounds of copper a year.









### Tombstone Vigilantes Saving a Playtime Bandit by His Artificial Neck

Don't ever go out with a gun again. That was the last words of Juan Heath, who was killed in 1882 by a vigilante. Heath was a bandit who had been shot by a vigilante. The vigilantes were a group of men who had been shot by a vigilante. The vigilantes were a group of men who had been shot by a vigilante.

Morenci's Tail Canyon goes up to the mile-wide pit. From its topmost bench we looked into a hole so deep that men below us were almost lost to sight (page 375).

Electric shovels scooping up 5-cubic-yard bites grow into 20-cold benches, or terraces. From each the ore, containing a copper sulphate, to the concentrator, which grinds and washes the ore, and discards the waste and recovers the copper content from the waste. The percent in the ore is 25 in the concentrator product.

A smokestack taller than the Washington Monument exhausts fumes from the smelter, but copper smoke, we peered through dark streams into a blue furnace, burning natural gas. The hot metal slowly separates an Arizona sunset. To reach the furnace, we

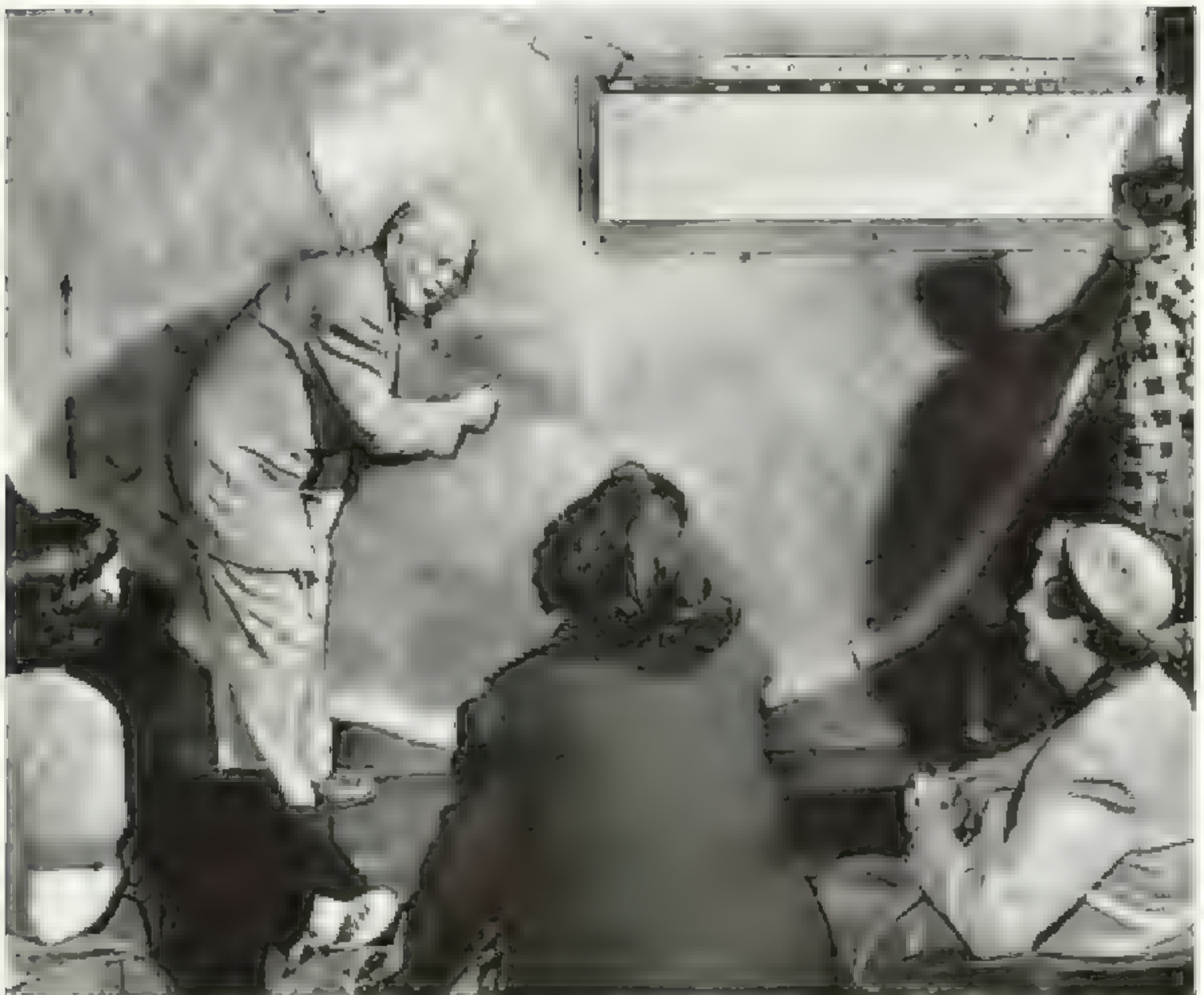
walked on very copper, and slag flows like

to see the disposal of the concentrator's liquid waste — Morenci's most spectacular operation. This waste is a mixture of rock particles and water, coming from the grinding necessary to separate minerals from barren rock.

Mountains and the sea are churned into a thick soup are filling a canyon with immense mud pies. Liquid tailings flow down hill, build their own dams, and level off behind them, laying out table-smooth, chalky rock areas 1,000 acres. Seen from an eminence the tailing dams look like frozen lakes or salt

A day in Tombstone gave us a picture of one of the West's most fabulous mining camps





Dr. A. T. Douglass

#### Dr. A. T. Douglass, Who Dates Trees by Growth Rings, Points to the Years 1634-1661

Dr. A. T. Douglass, of the Smithsonian Institution, is the expert on the subject of tree growth rings. He has been studying the growth rings of trees in the Southwest for many years. He has found that the growth rings of trees in the Southwest are very regular and that they can be used to date trees. He has found that the growth rings of trees in the Southwest are very regular and that they can be used to date trees.

A fortune in silver lies under the ground below Tombstone, but underground water has retarded its development. Mines for three generations have been working the Tombstone silver mine, but the town has no silver. The town has no silver, but the town has no silver.

#### One Man "Hanged by Mistake"

The town is a small town; it is the headquarters of the silver mining industry. The town is a small town; it is the headquarters of the silver mining industry. The town is a small town; it is the headquarters of the silver mining industry.

One of the most famous men in Tombstone was a man named John Harte. He was a man who was famous in Tombstone. He was a man who was famous in Tombstone. He was a man who was famous in Tombstone.

John Harte was a man who was famous in Tombstone. He was a man who was famous in Tombstone. He was a man who was famous in Tombstone. He was a man who was famous in Tombstone.

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for Billy Clanton, Frank McLowery, and Tom McLowery, all victims of one of the West's most spectacular gun fights. They were killed October 26, 1881, by the brothers Wyatt, Virgil, and Morgan Earp, all peace officers, and a cronny, Doc Holliday, in a battle at the OK Corral, the climax of a smoldering feud. Within less than a minute three men lay dead and three wounded.

### Guns Still Blaze in OK Corral

Nothing in its turbulent history disturbed Tombstone so much as that battle. Did the Earps fulfill their official duties, as a court decided, or did they remove hostile witnesses, as enemies contended? Eyewitnesses have passed on, but Tombstone still debates the Earp-Clanton feud.

In October, at its annual Hellboreo, Tombstone's Vigilantes enact the gunfight with six-shooters and blank cartridges. Then visitors swell the town's population from 900 to as many as 20,000, and most of them crowd around the OK Corral, now a vacant lot, to watch a drama that never grows old.

When six-shooters stop blazing, cap pistols go to work. Boys start mowing one another down; they enthusiastically drop dead all over the pavement. Scarcely a boy in town does not own a set of guns, and even little girls play cowboy (page 357).

Vigilantes start growing beards two or three months before the celebration.

"You grow so accustomed to whiskers that you scarcely recognize your friends when they finally shave," one Vigilante told me.

Tombstone was named by Ed Schieffelin, who, starting to prospect in an Apache-infested country, was warned, "All you will find is your tombstone." Discovering one of the West's richest strikes, he said, "Here is my tombstone."

So many miners, gamblers, gun fighters, and hangers-on poured in that by 1881, its heyday, Tombstone had 7,000 residents or more. Every other house in the business section was a saloon, dance hall, or gambling den. Gamblers from Dodge City, Kansas, arrived in a body.

Rackless cowboys matched their speed on the draw with tinhorn gamblers. A fabulous list of characters, male and female, settled down to enjoy the miners' flood of riches. The diggings yielded millions of dollars worth of silver, but their prosperity was short-lived. Water, found around the 400-foot level,

stopped work, and by 1890 the population dropped to 1,875.

Today when Tombstone people talk of reopening the old shafts they think of mining water, which in Arizona is almost as precious as ore.

In the parched, fortifying hills behind the town you will find the abandoned slopes and glory holes where men once dug like moles. Be careful as you step over that leish, or you may land 200 feet down an open shaft.

Beside the firehouse at 5th and Toughnut Streets, an immense opening marks the Million Dollar Stope, a former silver producer. Here a cave-in once dropped an ice wagon into a tunnel. The driver jumped free; his horse emerged unscathed from a shaft a quarter-mile away.

"No trespassing," says a sign, a warning ignored by three schoolboys a year and a half ago. Playing hooky, they explored the stope, which leads into a labyrinth of dangerous chambers. Before long they were as lost as Tom Sawyer and Becky Thatcher in the limestone cave. Several old-time miners, at the risk of their own lives, fished the boys out 12 hours later.

### Show Girls' Trunks Gather Dust

C. M. Palmer, Jr., a former Virginian proud of his 1882 adobe house, guided us through Tombstone's historic places.

First of these was Schieffelin Hall, a famous theater now turned into a museum. Flying buttresses supported its adobe walls. In the dark, unfinished basement we inspected actors' dressing rooms inscribed "Tomb A," "Tomb B," and "Tomb C." Antique trunks of bygone chorus girls moldered in a corner. On a wall "Lester & Allen" scribbled the words, "Played here February 5, 1883." "Ben Hur was rotten," said another eloquent pencilled scrawl.

The Bird Cage Theater (1881), named for the bird-cage-like boxes in its auditorium, also survives as a museum (page 356). Here the Marshal Earp and Sheriff Behan factions, hardly the best of friends, used to take seats on opposite sides, scowl at one another and watch the variety shows. Show girls served drinks between acts.

Antique arms fill a gun rack where customers were required to park their hardware. Wall displays picture famous acts. Says one: "Prof Charles Anderson, magician. He showed at the Bird Cage in the early 1880's. He





Three fawns in a forest.

## A Fox Gait Ramp in Henderson Mountains

From a mountain top, just  
above a small town, I  
saw a fox gait ramp, a  
series of steep, rocky  
steps, and a small  
cave. The fox gait ramp  
was a series of steep, rocky  
steps, and a small cave.  
The fox gait ramp was a  
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The fox gait ramp was a  
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steps, and a small cave.

Three fawns in a forest.





assistant would shoot at him and he would show the bullet in his teeth and then spit it on the floor.

"A drunken cowboy pulled his gun and said, 'Catch this one, Professor.' A theater patron struck the cowboy's arm as he shot a hole in the ceiling."

Gone are most of the Crystal Palace Saloon's oil paintings and brass fixtures; juke box and leather frames replace them. Silenced are the sinister whispers of gamblers, the shrill laughs of show girls. The drinks are still hard, but now the Palace caters to tourists.

There I met Bob Johnson, a cowman who came from Texas in 1893. Recently, he related, he installed his first indoor plumbing and took his first shower.

"Scalded myself, too," he said. "Forgot to mix cold water with the hot, and I nearly went through the wall."

Windows broken, the Cochise County Courthouse, built in 1882, stands in ghostly disrepair. Tombstone suffered a staggering blow when the county government moved to Bisbee at the height of the depression, leaving the Courthouse vacant.

#### *Epitaph Reports the News*

The *Tombstone Epitaph*, whose files record the town's story almost from the beginning, is still published once a week, but now leans more to social events than gun fights (page 362).

"I've seen the mornings when I could have fired a cannon down Allen Street and hit no one," an editor told me.

"Biggest Rose Bush in the World," proclaims the sign of the Rose Tree Inn. In its path grows a Banksia rose planted in the 1880's. The original slip has grown into a tumbler covering the courtyard. When in full bloom, laden with thousands of tiny white blossoms, it looks like a snowbank, and the delicate scent can be detected two blocks away. It's a real treat on a moonlight night.

Proprietor of the Inn is Mrs. J. H. Maria, who was born in Tombstone in 1881 and has seen all its changes. "Tombstone is a religion to Mrs. Maria," say her friends. "She never gave up when things looked blackest. As much as anyone, she made Tombstone 'too tough to die.'"

Copper-mining Bisbee, Tombstone's neighbor, is famous for its mineral riches, postal service, and mountainous streets. Bisbee is by no means on the level. Two miles long

and a block or so wide, the city rises along both sides of a deep gulch. Houses stand on terraces pitched one above another like swallows' nests on a cliff.

The Bisbee postman never rings twice; he never rings at all. To save him weary steps up and down hill, bisbeens daily trudge to the post office for their mail. They take pride in the fact that their community (population 3,800) is one of the largest in the U. S. without house-to-house delivery.

#### *Buffalo Graze Old Fort's Lands*

Not far away, in the Huachuca foothills, lies Fort Huachuca, recently closed, one of several army camps that used to girdle the Apache country. It lies in a game preserve. Foxes and wild javelina hogs (peccaries) mix its garbage pails; cottis hunt quail and eggs (page 365). Mountain lions and an occasional gray wolf also wander in.

A herd of State-owned buffalo crops the fort's open range, usefully reducing the fire hazard. As we drove into their midst, more than 400 shaggy animals regarded us with benign, well-fed expressions.

A few motorists and their children, convinced the bison are tame as dairy cows, get out and try to pet them.

"That's a dangerous and foolish stunt," said Harry W. Anderson, ranger in charge of the herd. "You can't trust buffalo even in the corral. You never know when one may decide to charge. One old bull rogue, whipped out of the herd, chased me last week. Camp rumor says another bull treed two G.I.'s who tried to stroke his horns."

"Recently the entire herd got spooked and stampeded into the mountains when a P-51 buzzed them; they didn't come back for a week."

The ranger, who regularly worms and sprays the bison, says they are harder to handle than cattle "until you get used to them." Not long ago when the size of the range was reduced, half the herd was slaughtered. Hunters paid \$25 each for the privilege of killing a bison and taking the head, hide, and fore quarter.

#### *Apache Scouts Helped Fight Indians*

Fort Huachuca's famed Apache Scouts are no more, the last six having disbanded in 1946. Today their adobe quarters are falling into ruin. The thought of these brave men, who assisted the Army in the days when Indians were still a problem, prompted us to





### Town-ripe Dates Give Suburban Tucson an Oriental Flavor

Hardly a day goes by now when you cannot find a date tree in some suburban home. The date tree is a common sight in the gardens of the suburban homes of Tucson, Arizona.







Red Pine in the Desert; Peppers Crown Near the 'Hot' in the 'Tide

and a best from a land on a street. Peppers (insets) after the new in come and make and appear in the

200







## Rodeo in Cowan Ranch

The rodeo is a popular event in the state of Texas. It is a competition of various events, including horse riding, bull riding, and steer wrestling. The rodeo is held in the state of Texas, and it is a popular event for people of all ages.

## Calf Gets a Ride

A calf is a young animal that is born from a cow. It is a common sight in the state of Texas. The calf is often seen in the state of Texas, and it is a popular event for people of all ages. The calf is often seen in the state of Texas, and it is a popular event for people of all ages.





### ...Cowboys Corral a Herd

Once the mob is penned in a bunch of  
 one or two animal parties, and when  
 it has been gathered in the all-  
 what is the best way to get the cattle  
 into the corral?

### Hot Iron Burns Hide

A waste of roundup, the cowboys will  
 be cut out, such as to be a good  
 calves to be marked on the back. The  
 days of the roundup are over, and  
 branding is still a necessary part of  
 the roundup. The cowboys will  
 brand the calves on the back, and  
 the calves will be marked on the back.  
 The cowboys will brand the calves on the back, and the calves will be marked on the back.





# Youngful Grins Tell a Success Story in Apache Town

For a small Indian reservation in the heart of Arizona, the Apache Town Community Center is a place where the future is being built one child at a time. The center, which was founded in 1965, has become a hub of activity for the town's young people, providing them with a safe and supportive environment where they can learn, grow, and thrive.

The center's programs are designed to meet the needs of the community, offering a wide range of activities from sports and arts to academic and vocational training. The center's success is a testament to the dedication and hard work of the staff and volunteers who have made it a place where every child can find a home.





# Tumacacori Mission Revives Indian Days With a Boom

In the month of February the representatives of New Spain, including the Indians, met at the mission to celebrate the feast of the Virgin Mary, the patron saint of the province.

The present church is the only one left of the mission, which was founded in 1583 by Father Kino, a Jesuit missionary.

The mission was founded by Father Kino, a Jesuit missionary, who came to the mission in 1583. The mission was founded by Father Kino, a Jesuit missionary, who came to the mission in 1583.

The mission was founded by Father Kino, a Jesuit missionary, who came to the mission in 1583. The mission was founded by Father Kino, a Jesuit missionary, who came to the mission in 1583.

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By the way, the mission was founded by Father Kino, a Jesuit missionary, who came to the mission in 1583.



A WAYS IN TUMACACORI

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Papago Indian Women Pick the Saguaro's Red Fruit with 25-foot Poles

Illustration by Y. S. ... ..  
 ... ..  
 ... ..





Six Rules of Play and 44 Mattresses Swaddle a Family 12-ton Squares on Moving Day

And, as a consequence, a  $\frac{1}{2}$  degree of freedom is lost. This is not a problem in the present case, because the  $N(1,0)$  state is not a ground state. The only other state that is lost is the  $N(0,0)$  state, which is not a ground state either. The only ground state that is lost is the  $N(0,0)$  state, which is not a ground state either.



[illegible]

1. The first part of the paper is devoted to a review of the literature on the topic. It starts with a general overview of the concept of "social capital" and its importance in the context of organizational performance. The review covers various theoretical perspectives and empirical findings, highlighting the challenges and opportunities associated with measuring and utilizing social capital.

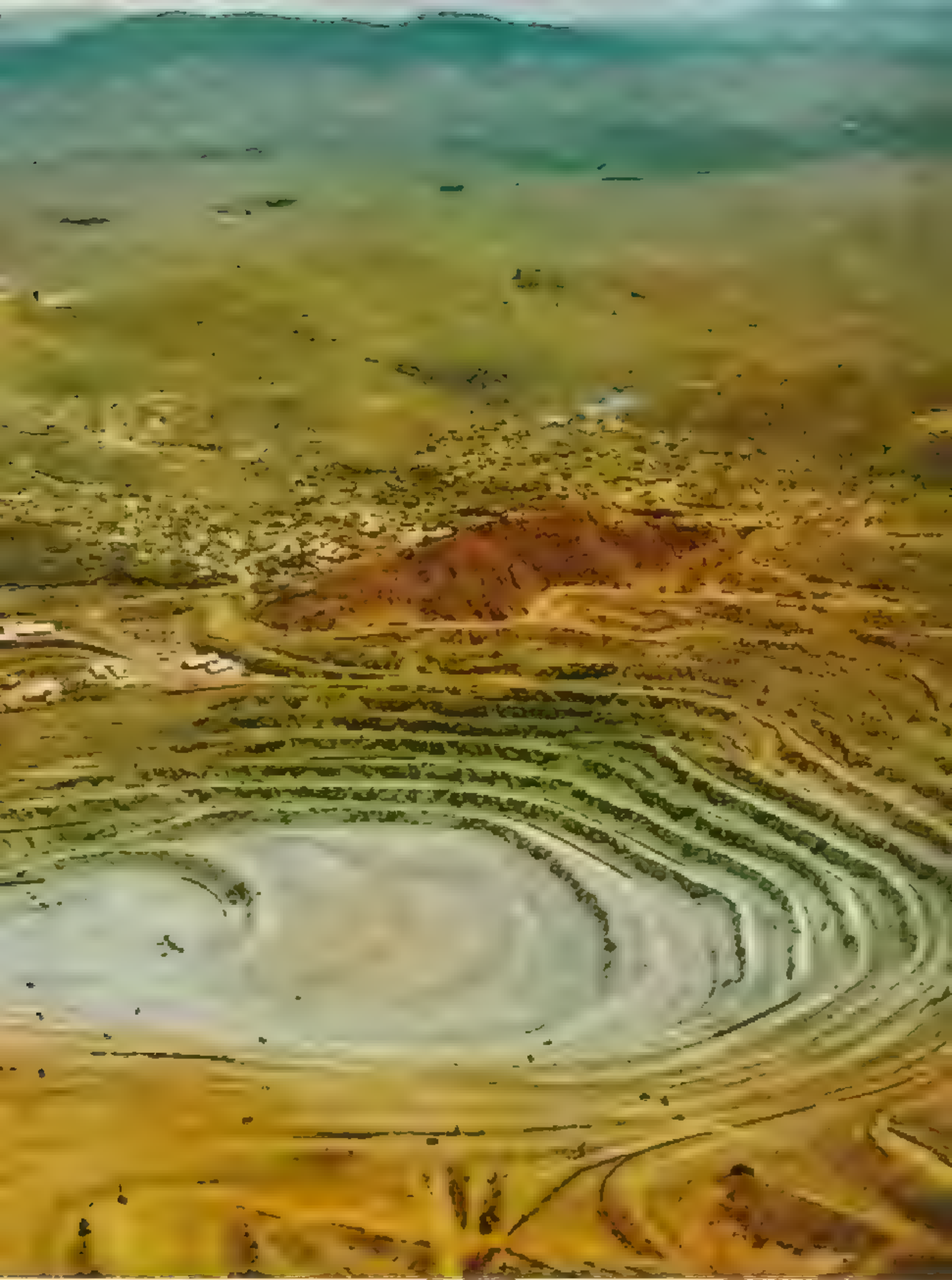












Twenty-five enormous Benches Terracing the Copper Mine Form a Bewildering Labyrinth. Each bench down to the bench above it, takes bites of five cubic yards. Electric trains, hauling ore in their massive chutes to the bottom and trains dump waste 1,000 feet down piles as on the left.





350

Indian Children Kihitz Artist Pierre de Grazia Sketching Mission San Xavier del Bac

Photograph by the author. The author has been in the Southwest for many years, serving 500 Indians on their reservation. He has been a student of the art of architecture for many years. He is a member of the American Institute of Architects.





# Father Cleostine Chinn, O.P.M., Says Mass Before San Xavier's 154-year-old Altar Screen

Father Cleostine Chinn, O.P.M., says Mass before the 154-year-old altar screen of San Xavier. The altar screen is a masterpiece of Spanish Colonial architecture, featuring a central figure of the Virgin Mary and Child Jesus, flanked by two large, arched windows. The altar is flanked by two large, arched windows. The altar is flanked by two large, arched windows.





Graduates of Southern Arizona School for Boys Barn Their Horses into Caring Beasts  
 Boys in the Arizona School learn to ride and to take care of horses. They learn to take  
 care of and to be kind to the horses. They learn to be kind to the horses. They learn to be kind to the horses.



visit surviving Apaches on the San Carlos Apache Indian Reservation.

Tales about Cochise, the Chiricahua Apaches' wily leader, and his warriors gave us immense respect for that small body of horsemen who ruled Mexico at will and for years defied the power of the United States Army. Cochise and his men never raised a horse or a cow; they rustled them, and whatever supplies were needed. Masters of surprise, camouflage, and ambush, they made the country unsafe for miners and ranchers.

Cochise, giving up the fight in 1872, virtually dictated the terms of his surrender. Geronimo, the outlaw Apache, carried on guerrilla war until 1886.

Visiting Cochise Stronghold, northeast of Fort Huachuca, we found a natural fortress so well boxed in by canyon walls that a few sentries could have defended it. There Cochise died in 1874. To obliterate every trace of his grave, faithful braves ran their horses up and down the canyon. Only one white man, Tom Jeffords, Cochise's brother by blood rite, knew the secret, and he carried it to his death 40 years later.

#### "Wagon Wheels" Broke Indian Power

Apache Pass, a defile between the Dos Cabezas and Chiricahua Mountains, showed us the spot where Cochise suffered his only major defeat. Here the Apache leader in July, 1863, lay in ambush for 11 companies of Union infantry marching toward a spring which he commanded. Hidden behind trees and rocks, his warriors poured down musket fire and arrows.

The soldiers, almost delirious from heat and thirst, saved themselves by firing howitzers, which the Indians, meeting for the first time, called "wagon wheels." These small cannon, mounted on wheels and pulled by soldiers, penetrated defenses that turned rifle balls aside. Leaving 63 dead, the Apaches fled the scene after the worst defeat they ever suffered in a single battle.

This same Apache Pass, a point on the immigrant road to California, became the grave of so many travelers that the stagecoach line offered triple pay to drivers. We found wheel ruts of the pioneer stage line, Butterfield Southern Overland Mail still scarring the earth. Making no attempt at grading, the abandoned line zigzags across the modern road. At times it parallels a wide gash tracing the freshly laid El Paso-Los Angeles natural

gas pipe line. Imagine what old-time Apaches would have done to the pipelayers!\*

I met one Apache who piped the line's gas into his home. Clarence Wesley, chairman of the San Carlos Apache Tribal Council, grows alfalfa and barley and runs 70 head of cattle on the Gila River bottom. A member of the Miami Rotary Club, he often drives 60 miles to meetings. I found him supervising two sons who were currying a handsome bull calf for a 4-H show.

White neighbors treat Mr. Wesley with a good deal of respect. Under his leadership the San Carlos people have made rapid strides. Their pride is a herd of registered Herefords bred by artificial insemination. Cattlemen attending the Apaches' sales pay high prices for bulls.

"I have to lead my people; I can't drive them," Wesley told me. "I encourage them to get an education so they can take their place in American society and be a part of the community."

When we asked Wesley if any Cochise descendants survived, he said, "Yes, my mother-in-law, for me; she's his granddaughter." Asked to call her, he pointed to a pole-and-brush wickup and, with a twinkle in his eye, replied:

"You know I'm not supposed to talk to her."

Wesley, wise in the white man's mores, referred to the Apaches' avoidance relation, whereby husband and mother-in-law keep apart, though living in the same household. Arizona humorists see great merit in the institution.

#### Doc Rogers in the Desert

Leaving the Apaches, we visited a pavement-reared, tongue-in-the-cheek exemplar of the Old West. He is cartoonist-writer Doc Calkins, originator of Buck Rogers. Mr. Calkins and his wife Margaret occupy 20-acre Buck Rogers Ranch—"just room enough to swing a horse" in Sulphur Spring Valley.

Calkins, a savage gun fighter with blank cartridges, has decorated the living room with rifles, pistols, sawed-off shotguns, cavalry sabers, reward notices, cattle skulls, and his own aviator's helmet from World War I.

Seven years ago, he told us, he was in Chicago fighting syndicate dead ends and a back injury.

"When my doctor told me I would have to

\* See "The Eternal Flame," by Albert W. Atwood, NATIONAL GEOGRAPHIC MAGAZINE, October, 1951.







# Crickets, Nature's Expert Fiddlers

383

Celebrated in Story and Legend, These Accomplished Insects Are Musicians, Ventriloquists—and Thermometers

By CATHERINE BELL PALMER

National Geographic Magazine Staff

ON September 15, 1933, Silver Spring, Maryland, the incessant *chirp, chirp, chirp*, of a cricket in the house interrupted my reading. During the summer I had become so accustomed to these insects' familiar calls outdoors that I rarely noticed them. But within the four walls of a house the chirp seemed to double in volume and fill the whole living room.

My mother, Ginger, cocked her head, looked up at me with a puzzled expression. "Where is the cricket?" she asked. "In the kitchen," I joined her, but whenever we reached a spot where we thought the cricket was, its call seemed to come from another part of the room.

## Fiddle by Scraping Wings

This aural illusion was no accident. Most crickets, like cicadas, become ventriloquists to deceive pursuers.\* Nature's fiddlers, they produce their shrill music by rubbing their wings together. When the common field cricket wants to make his call, he raises his fore wings at an angle of about 45° to his body. A file on one wing rasps against a scraper on the other, creating the sound variously described as *treat-treat-treat*, *cree-cree-cree*, or *gru-gru-gru* (page 391).

During this fiddling process, called stridulation, the insect controls the volume and direction of the sound by position of the wings in relation to the body. To make the muted, muffled notes giving the illusion of distance, the wings are lowered close to the back. Some species—certain small bush crickets, for example—do not sing at all.

Of the 2,000 known species, the one we were chasing probably was *Acheta domestica*, the common field cricket. Although *Acheta domestica*, the house cricket of the Old World, has been introduced here, it is not nearly so ruminant as the field cricket.

Through the ages the cheerful chirp of the cricket has been woven into literature and legend. Charles Dickens did more than any other writer, perhaps, to popularize the little creature with his classic *The Cricket on the Hearth*. In this charming story there is a contest between a kettle and a cricket to determine which can sing louder and longer. Cricket wins when the kettle boils over.

The song of the snowy tree cricket, *Oecanthus niveus*, evoked extravagant praise from

Nathaniel Hawthorne. "If moonlight could be heard," he wrote, "it would sound like that." Henry David Thoreau called the sound "a shimmerous breathing" and "an inner dream."

To many, the steady chirping of a cricket, reminiscent of a singing teakettle, suggests peace and comfort. The French entomologist, Jean Henri Fabre, proclaimed, "I know of no insect voice more gracious, more limpid in the profound peace of the nights of August."

But a *New York Times* nature writer, Hal Horland, apparently had an experience similar to mine. In a *Times* editorial he described a cricket as "a black, ambulatory noise surrounded by a sentimental aura. On occasion it lives in the open fields, but its favorite habitat is behind a couch or under a bookcase in a room where somebody is trying to read. It has six legs, which make it an insect; two antennae, which make it a creature of sensitive feelings; two wings that can be scraped together, which make it a nuisance."

In old England it was considered good luck to have a cricket chirping on the hearth.

For centuries cricket fighting has provided a national pastime in China. Records of celebrated insect fighters are preserved by the Chinese as records of thoroughbred race horses are kept in other countries. Weighed in before every fight, crickets are divided into heavyweight, middleweight, and lightweight classes (pages 388, 389).

Some devotees of cricket fighting raise the insects and hire professional trainers to feed and care for them. Special diets consisting of rice, boiled chestnuts, and mosquitoes are given before a fight.

## Temperature Affects Song

In both China and Japan crickets are also kept as musical pets. In the days of the Chinese empire even the palace had its royal chorus of crickets. Beautiful specimens of cricket cages are now museum pieces (page 393). Common folk had to be content with cages of bamboo or of coconut shell; the rich had guards with covers made of carved ivory and jade. Cricket cages in the collection of the Chicago Natural History Museum include one made from a carved walnut shell.

Whether the call of this fiddling member of

\* See "Rip Van Winkle of the Underworld," by Kenneth F. Weaver, *National Geographic Magazine*, July, 1933.









### Chickadees Bred in a Georgia Hatchery Appear at the National Geographic Society

On August 21, Mrs. Mary Hensley, of the Georgia Hatchery, presented to the National Geographic Society a large number of chickadees, which she had bred in her hatchery. The birds were of the variety known as the "American" chickadee, and were of the variety known as the "American" chickadee. The birds were of the variety known as the "American" chickadee, and were of the variety known as the "American" chickadee. The birds were of the variety known as the "American" chickadee, and were of the variety known as the "American" chickadee.

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To the Editor of the National Geographic Society, I am very pleased to present to you a large number of chickadees, which I have bred in my hatchery. The birds are of the variety known as the "American" chickadee, and are of the variety known as the "American" chickadee. The birds are of the variety known as the "American" chickadee, and are of the variety known as the "American" chickadee. The birds are of the variety known as the "American" chickadee, and are of the variety known as the "American" chickadee.





### "Get In There and Fight" A Hindoo Trainee Battling Crickets

The Hindoo trainee, seated on the wooden bench, is looking down at the cricket bat he is holding in his hands. He is shirtless and appears to be in a state of concentration or fatigue. The background shows a wooden ladder leaning against a tree and some foliage.

ground and strikes 5 percent of the crickets with.

As a result of an experiment with a sound-receiving and measuring apparatus in the forest, the trainee discovered that some crickets make a particularly loud sound, and that the Hindoo trainee can hear.

#### Why Does a Cricket Sing?

Another scientist timed a snowy tree cricket at 1 chirp per minute, or 5,400 chirps per hour in a 12-hour night. At this rate it would chirp nearly 4,000 times in a night. Only a few crickets are seen. The males, with ears in their knees, listen; wingless female crickets are seen and not heard.

The chirping power of crickets is surprising. One cricket can chirp and sing notes which could be almost heard. Chirping of crickets has been recorded on record. The late Dr. Frank B. Row, former director of the Department of Insects, The American Museum of Natural History, New York City, analyzed crickets that the notes of some species consist of beautiful, sweet slurs like those of an expert violinist.

Why crickets sing is a question which has been trying to puzzle scientists. The crickets sing to attract mates, but why the common song? Some believe that crickets and their crickets have a common song, but for the same reason that birds and





## A Cricketers' Sting Is Our White Bag-eyed Bottoms' Watch

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**Ticketing Advice: Cricket**  
**Match Programs to Buy**

The first important observation concerns the fact that the number of observed failures is small. This is due to the fact that the number of failures is small. A second important observation concerns the fact that the number of failures is small. This is due to the fact that the number of failures is small.







399

THE CHICKEN, A SYMBOL OF COURAGE

### Johnny Chicken, Symbol of Courage, Becomes a Horned Monster by Camera Magic

A picture of a very old, highly respected and popular chicken, which has been a symbol of courage for many years, is shown in the photograph above.

The chicken, which is named "Johnny," is a Game chicken, and is a very old bird. It is a symbol of courage, and is a very popular bird in the South. It is a very old bird, and is a very popular bird in the South.

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humans sing; they love sound and find it a means of self-expression. Another theory is that male crickets sing to challenge members of the same sex.

In contrast to the sawing of the grasshopper and the lisp of the katydid, a distinctive feature of cricket music is its definite musical pitch. One naturalist recorded the sounds of three different species of tree crickets and found they were singing, respectively, C (D on warm nights), E, and F, starting two octaves above middle C.

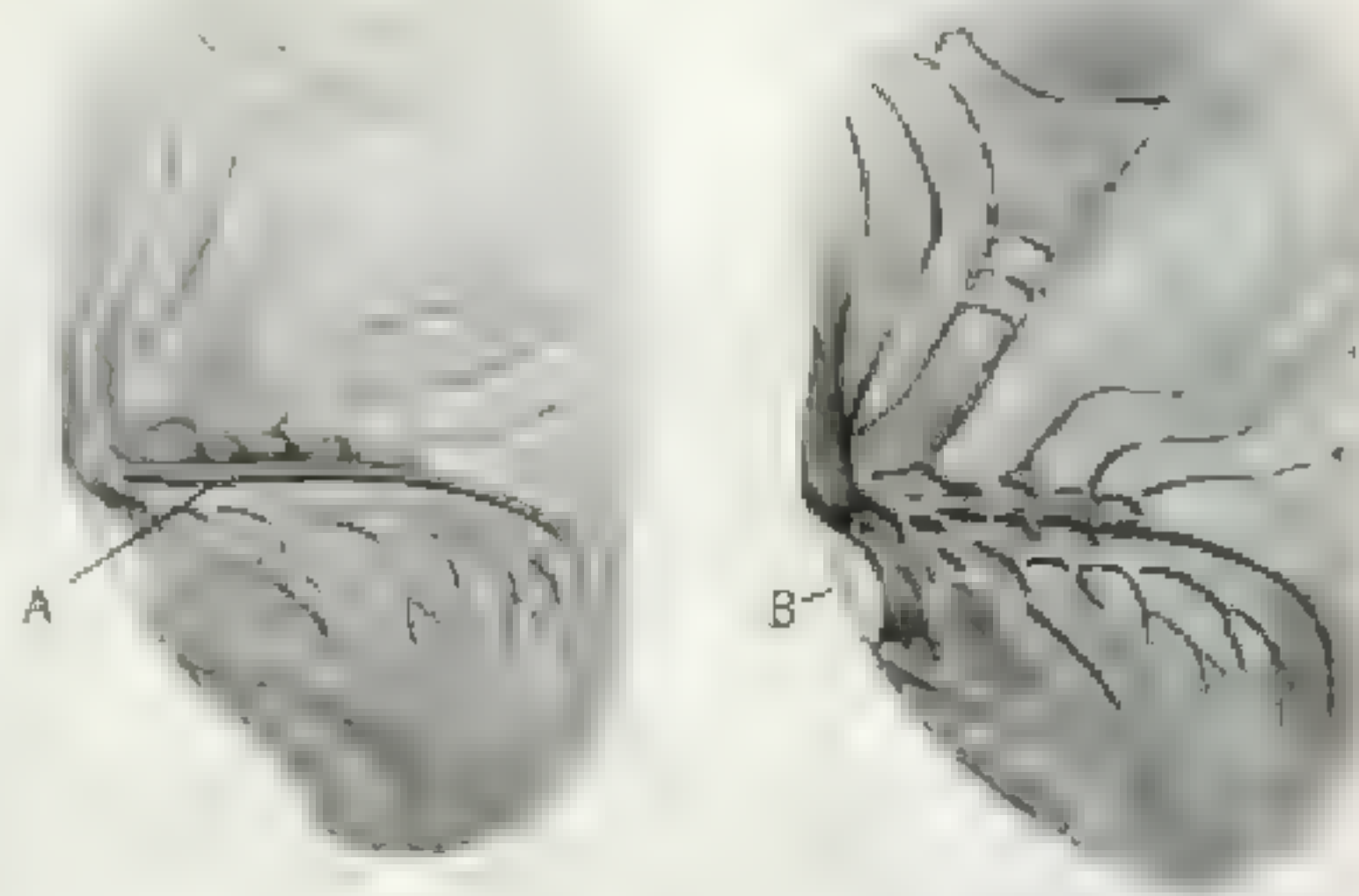
Not normally household residents, crickets do enter houses in late summer when vegetation becomes scarce. Once inside they will eat clothing, upholstery, carpets, and even rubber shoes. To get rid of them, the United States Department of Agriculture recommends DDT as a 5-percent spray or 10-percent powder; or chlordane as a 2-percent spray or 5-percent powder applied around baseboards or other places where the crickets may be hiding.

In Cleveland, Ohio, angry housewives whose homes were invaded by crickets from a city dump armed themselves with cricket-filled paper bags, marched into the office of the city's service director and released the insects. Their action forced the director to order a 10-foot strip of concrete between the dump and the city property. A DDT barrier on the strip and a spread wall of insecticide against the dump's garbage dumpings.

#### Chirps Drown "Yankee-Doodle"

A few summers ago, crickets in the thickets around the Carter Barron Amphitheatre in Rock Creek Park, Washington, D. C., chirped so loud during a performance of *For Green*

*Faith of Our Fathers* that the management had National Capital Park Service people spray with insecticide. But the crickets' chirps were just as loud, especially when the orchestra played "Yankee-Doodle."



301

#### Cricket Produces His Cheery Chirp by Rubbing One Wing Against Another

To sound off, the male insect raises wings above body and moves them back and forth laterally so that the file (A) rubs against the scraper (B). This action vibrates the wings and creates the sound (page 305). Only adult males chirp. Some scientists say the cricket's song is a mating call. Others maintain it is a challenge to all other males of the same species of self-expression. The insect's name comes from the French *criquer*, to creak.

When crickets are numerous outside the United States Department of Agriculture has an immediate remedy to destroy them. A good bait formula contains 25 pounds of grain, 1 pound of sodium fluoride or sodium fluosilicate, 2 quarts of molasses, and 2½ gallons of water. Care should be taken to prevent children and pets from eating the bait.

Western United States farmers are sometimes beset by the crop-devouring Mormon cricket, *Anabrus simplex*. A notable invasion by this species, not a true cricket but related to the grasshopper, was the plague of 1848 in the Mormon settlement at Salt Lake City. Their crops doomed to destruction, the Latter-





Georgia's "Bug Factory" Turns Crickets into Cash

George Smith of Hapeville, Ga., started his live-bait hatchery with a handful of crickets and a few dollars' worth of equipment. Now he has a business that is doing well and has a reputation for supplying live crickets to the fishing community. The crickets are raised in a large, open-air building with a roof of corrugated metal.

day. Saints prayed for aid. As if in answer to their prayers, sea gulls swooped down to feed on the insects, leaving a remnant to the birds. Bands in Temple square of India compared.

The western world, where farmers black-bird and the sea thrasher are enemies of wheat. Millions of wasps, *Sphecus fuliginosus*, and their enemy,

#### Crickets Hurry and Help Fruit Trees

Tree crickets sometimes spread a certain disease in apple trees by their egg laying. The female lays one or two or three with her abdomen. Then she lays a pale yellow, barrel-shaped egg in them.

Because of their egg laying and their love for berries, tree crickets are considered harmful to fruit growers. On the credit side, however, a single grower tree of haw was found to be free from 500 to 600 destructive scale insects in 1908.

In late summer, when the choruses of male crickets are heard, the females are busy laying their eggs just below the surface of the ground.

The first person to discover the value of crickets as bait was Dr. A. M. Smith of DeKalb, Ga. He was a student at the University of Georgia. He found that crickets were a good bait for crabs and other small animals. Dr. Smith found

\* See "The Crickets of the World" by W. A. Smith, National Geographic Magazine, May 1909.









## One More Step and This Fireside Troubadour Will Sing No More

THE FIRE-SIDE TRUOBADOUR, GEORGE SPURGEON, HAS BEEN AROUND FOR 30 YEARS, AND HE IS STILL SINGING. HE IS A BROWN, BEAR-LIKE MAN, WITH A BROAD, BEAR-LIKE SMILE. HE IS A BROWN, BEAR-LIKE MAN, WITH A BROAD, BEAR-LIKE SMILE.

He is a brown, bear-like man, with a broad, bear-like smile. He is a brown, bear-like man, with a broad, bear-like smile.

At College Park, Georgia, an estate purchased from the former Post Office quarters 387-392, George Spurgeon, 41 years old, is a brown, bear-like man, with a broad, bear-like smile. He decided to make the music for himself. In 1952 he sold a million.

One source of music is widely known in the area. It is sold in the local market in Maryland.

George, the professional musician from nearby villages, has been sold in the area, and his music is sold in the area. He is a brown, bear-like man, with a broad, bear-like smile.

The music is sold in the area, and it is sold in the area. The music is sold in the area, and it is sold in the area. The music is sold in the area, and it is sold in the area.

A recent record of the music is sold in the area.

George, the professional musician from nearby villages, has been sold in the area, and his music is sold in the area. He is a brown, bear-like man, with a broad, bear-like smile.

### Georges May Speak Dialects

An American musician is working on the theory that dialects have changed, and he believes that a great many of them can place their dialects in the past, and might be able to prove that a dialect was a dialect in the past, and he was a Yankee.

On the way, in the dialect, he found a great many of dialects, and he found that the dialects were in the past, and he was a Yankee.

On the way, in the dialect, he found a great many of dialects, and he found that the dialects were in the past, and he was a Yankee.



On a Route of Tragedy and Treasure, Old-timers and Ghost Towns Recall the Stampede of '88, 'Clean Mail for the Mad' Called Gold'

By AMOS BURG

*With Illustrations from Photographs by the Author*

**H**ARDLY a day passed in Seattle on that momentous day in July, 1897, before paper boys were hawking the news through the streets.

"Gold! Gold! Gold!" they cried. "Sixty-eight Klondikers bring back a ton of gold!"

It was the biggest strike in history, the papers said, a stream of gold in Canada's Yukon that flowed richer and richer as news of it flashed round the world. At first the nuggets were said to be as big as peas, then eggs, then potatoes. Gold nuggets of all sizes danced before the eyes of millions. Men of all callings, of many virtues and varied vices, fell victim to the lure. The rush was on.

Main goal and port of entry was Skagway, 1,115 sea miles north of Seattle at the top of Alaska's Panhandle. So it was natural that I chose Skagway as my own starting point for a recent trip back over one of the main routes of the stampede (map, p. 400).

Like thousands of early prospectors, I had sailed northwest from Seattle through the Inside Passage along the broken Alaskan coastline. From Skagway I planned to go by train and boat 600 miles farther, to the famed Klondike gold fields in the Yukon.

As our steamer glided up the Lynn Canal, a natural arm of the sea, to Skagway's port, I tried to imagine what it must have been like 50 years earlier. Not all the thousands who poured in had been hardy outdoorsmen.

In Tacoma streetcar conductors got together and sent nine men to the Klondike. Chiropractors in Chicago dispatched a medium to dig where the spirits directed. Within two months after graduation, half of California's fledgling doctors had left for the fields.

## Women Joined the Mad Rush

Women went, too. Greatly outnumbered by men, they were more than welcome in the north. "Any woman, innocent or full of guile," one of the returning miners reported, "can become a belle within 30 minutes after she lands at the creek."

Most miners toted the standard: 500 pounds of flour, 200 pounds of bacon, and 100 pounds of beans, plus tools and sundries which brought the typical pack to an even ton. To transport these mountains of supplies, plus the horde of humans and animals, every vessel on the Pacific coast was pressed into use—

every liner and whaler, every yacht, cutter, and ketch; even rusty old craft hauled out of their graves. On arrival at Skagway they simply dumped cargo and sped back for more. Horses, dogs, cows, and pigs were shoved into the water and forced to swim.

As I hurried down the gangplank, I felt I was entering the wings of a stage on which one of history's greatest dramas had been enacted. One of the original actors walked ashore with me, an old-timer who had been here in '97 and had come back to visit.

"Why, there's a wharf here now!" he exclaimed.

After a long pause he added: "It's sure quiet."

## Broadway Was Knee-deep in Mud

The old-timer walked with me along Skagway's Broadway, which resembles in places a Hollywood western set. In gold-rush days, my companion told me, when you walked the streets you sank in mud almost to your knees. Every 50 feet or so you'd stumble on a big lump, a dead horse that had keeled over from working too hard and eating too little.

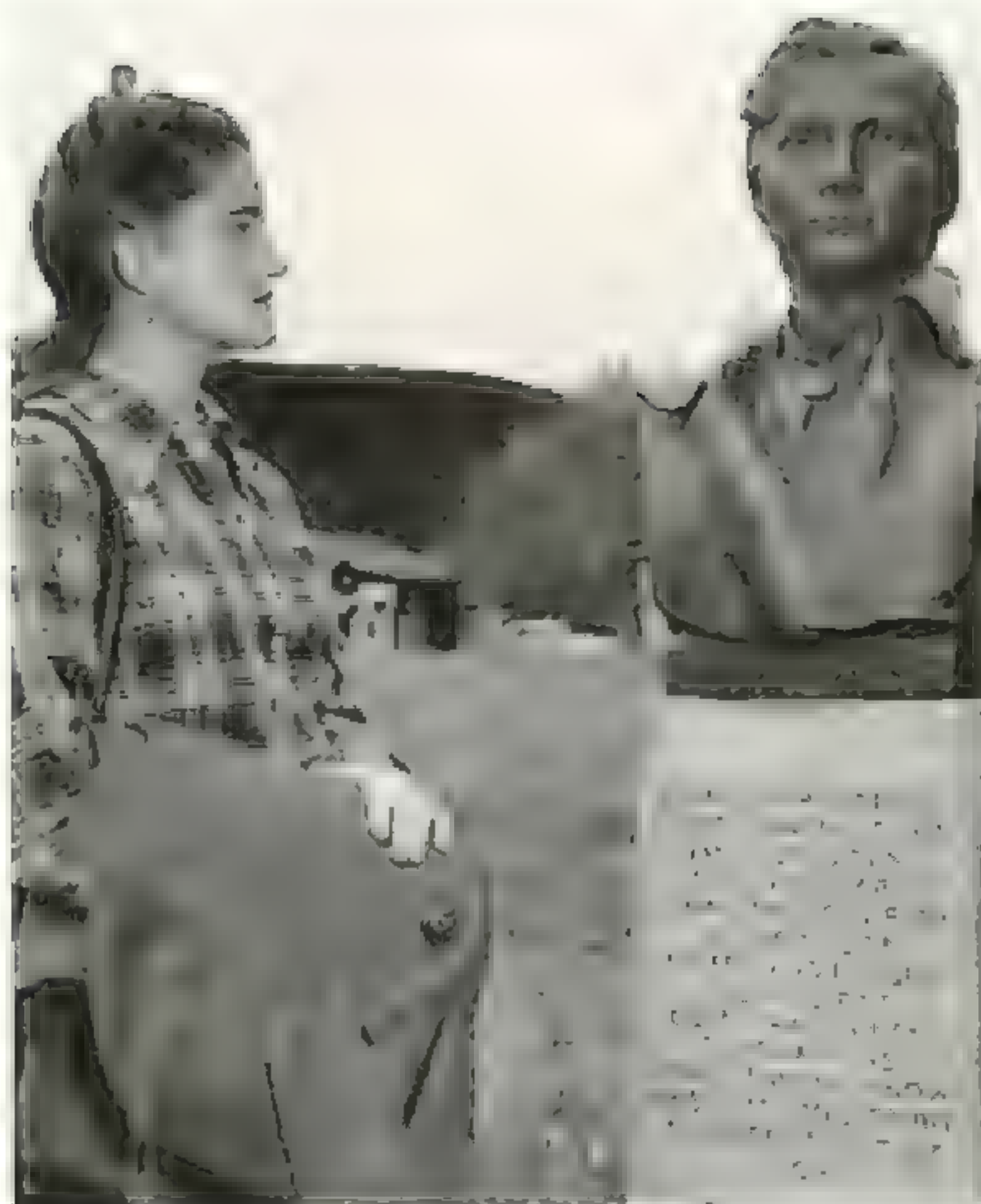
There was hardly a spot, he recalled as he looked down the nearly empty street, where you could pitch a tent. Some 15,000 people got here by '98. And there was a saloon for every 200.

Now a respectable little town of 750, Skagway shows its past only in spots, mostly in deserted, gingerbread-trimmed buildings that stare back hollowly when you peer in. One of these is a saloon once owned by Jefferson Randolph Smith, even today a legend in Skagway. They call him "soapy" Smith—but not because he lived clean; eventually he died in a gun fight with Frank H. Reed, a Vigilante.

## The Author

Amos Burg, adventurer, author, lecturer, and cameraman, was just 14 when he first went to sea. He has since piloted his own craft from one end of the Americas to the other. He cruised the Strait of Magellan in *Dorian*, a 76-foot sailboat, and voyaged the lengths of the Columbia, Snake, Yellowstone, Missouri, Mississippi, Arkansas, Slave, Mackenzie and Yukon Rivers in *Song of the Herds*, his canoe. He conquered the Grand Canyon in the Colorado in *Chimney*, a rubber boat. A Viking by ancestry, Oregonian by birth, Burg has been writing for the National Geographic Magazine since 1930 when his first article on the Yukon was published.





136

## A Skagway Rust Commemorates a Heroine of the Gold Trail

Two women traveled the far North coast of Alaska in stampede of the '90's. One of them was Marie Walsh, who kept a journal of the White Pass Trail. A former sweetheart erected this monument to her memory.

There were no Soapy Smiths to harass stampedeers once they crossed from Alaska into Canada. Across the border Canada's North-West Mounted Police had a firm hand on things. They made every stampeder register and saw to it that he was relaying at least 1,100 pounds of grub.

Most stampedeers came by ocean steamer to Skagway or Dyea, then lugged their gear over the Coast Mountains to the headwaters of the Yukon River. From there they poached down a waterway of lakes and rivers 550 miles to Dawson City.

Skagway and Dyea were bitter rivals for the gold trade. The route from Skagway led over White Pass; from Dyea, over Chilkoot Pass. It was 18 miles from Skagway to the summit of White Pass, the last two being a steady, hard climb; and it was another 17 miles from the summit to Bennett Lake. This route was longer than the Chilkoot, but the pass was much lower.

Both towns wanted desperately to be the main entry to gold. Both made the most of every opportunity to prove they should be. In April, 1898, when a terrible avalanche of wet snow roared 3,000 feet down Chilkoot, killing at least 50 people, a writer for the *Dyea Trail* slapped the rival Skaguans for taking advantage of this sad calamity by advertising their fever-stricken hole of hell.

"Skaguans have no shame," he wrote. "They are ghoulish enough to wish that there had been 5,000 buried if it only happened on the Chilkoot Trail."

The grade to Chilkoot's summit was 25 per cent; and, on the last half mile, 35 per cent. "Heaven to look at," they said, "and hell to negotiate." In summer Chilkoot was a precipice of sliding rock; in winter, a monster of ice. It was safer to cross it in winter, though, because a man was better off falling into a drift of snow.

Since it was almost impossible to get an animal up it, a man had to relay his own pack, some 50 to 100 pounds at a time (page 137).

Storms blew up frequently, blinding with snow and ice in his face, but once he started up Chilkoot there was no turning back. This was a one-way street: up. Man followed man, inch by inch, fingerhole to fingerhole.

## "Don't Build a Coffin"

Once over the pass the two trails met near Lutetian Lake and again at Bennett Lake. Here is where the stampedeers stopped walking and started paddling. But first they felled trees, sawed lumber, and built boats. "Bald string," named the Mounties who watched them, "Don't start off in a floating coffin."

When the ice went out of Bennett Lake, May 30, 1898, 800 land-borne craft showed off in the race to Dawson. Hundreds ahead, thousands behind, the pressure mounted and





397

### Dawson Firemen Staging a Drill, Hook onto an Electrically Heated Hydrant

Dyea was the first town in the Yukon and had not shown any signs of life since the fire. The fire had started in the town and the fire had been in the fire hose. The fire had been in the fire hose and the fire had been in the fire hose. The fire had been in the fire hose and the fire had been in the fire hose.

mounted. By the end of summer, according to the tally kept by the Yukon's 700 forest had started off, carrying 100 stampeders.

The survival of either Skagway or Dyea depended ultimately on which pass was chosen for a railroad route. When White Pass was chosen in 1898, Skagway blossomed and Dyea wilted. By 1900, when the railroad was finished, Dyea had shriveled to a trace of its once colorful self.

### High Hopes for a New Boom

Now, after all these years, Dyea may come to life again. I rode to Dyea with Chuck Roehr, who was superintendent of the rail division of the White Pass and Yukon Route. He told me something about Dyea's possible future as we poked among the remains of frame buildings and log cabins long ago engulfed by the wilderness.

The Aluminum Company of America has plans for building a \$700,000,000 power plant

smelting project in the Taiya River Valley, near Dyea. It would require a whole new town to support it.

So far, Alaska has refused Alcoa's proposal to use its Yukon water but Alcoa hasn't yet given up hope. Meantime, a Canadian firm, Ventco Ltd., has revealed an even more daring plan that would develop the Yukon's mineral resources as well as its water. Surveyors have already studied Yukon water and work on the first power plant is scheduled to start next summer. The project, which may take 20 years and two billion dollars to complete, calls for processing Canadian lead and nickel and for making pig iron, steel and aluminum from ore brought in from all parts of the world.

Back in Skagway again, Chuck and I boarded the train that was Dyea's undoing. A mere 110 miles of narrow-gauge track, the White Pass and Yukon was fondly called "the ugliest little railroad in the world" during







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The first of these is the fact that the
 *Journal of the American Medical Association*
 has been the only one of the four
 to publish a special issue on the
 subject of the "New England
 Journal of Medicine" in the
 month of January, 1910.

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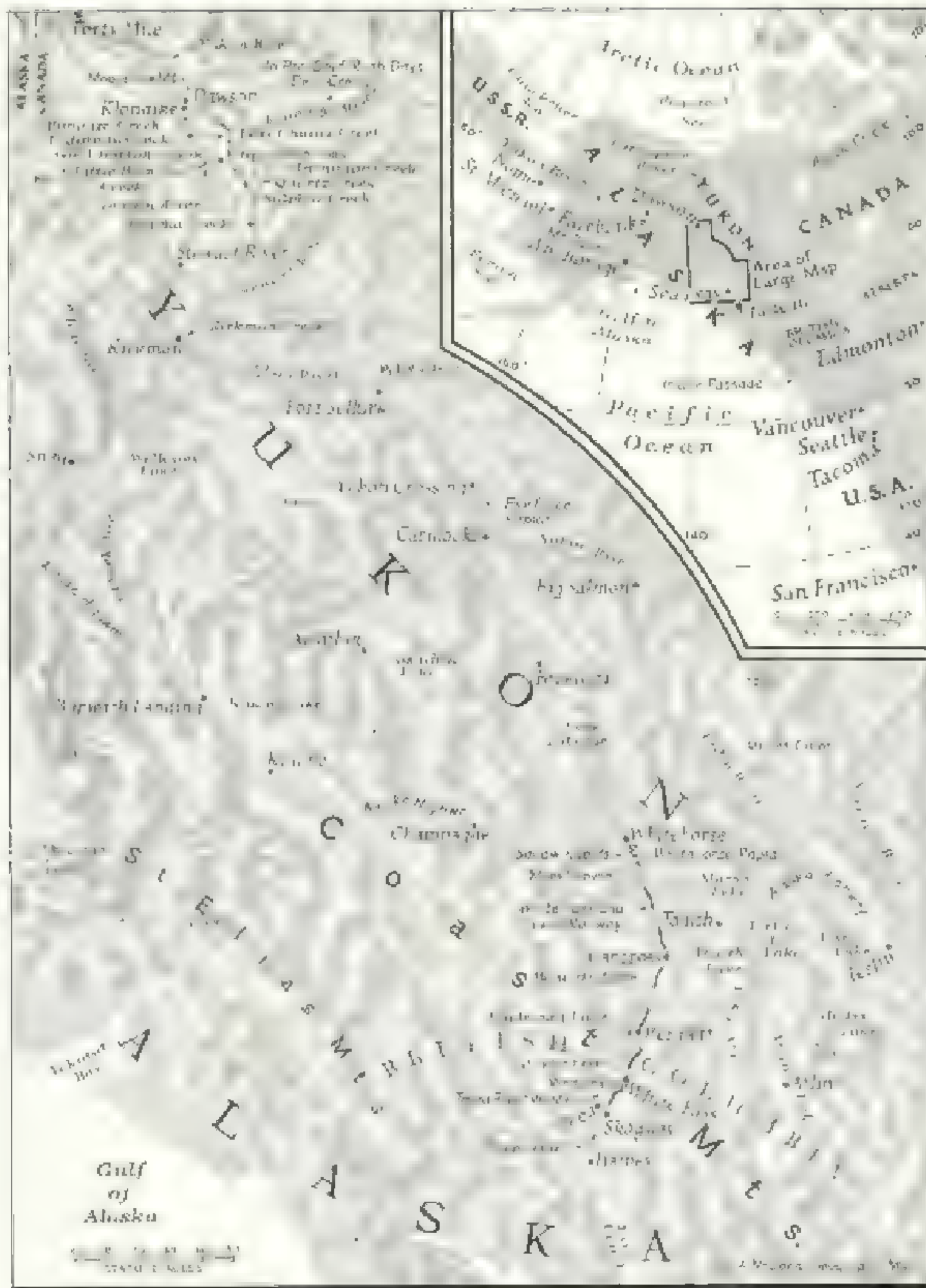
*[The page contains faint, illegible markings, possibly bleed-through from the reverse side.]*

1. The first part of the document is a list of references. The references are listed in a standard format, with the author's name followed by the title of the work and the publisher. The references are as follows:

- 1. J. H. Van Veen, *The History of the Netherlands*, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578,

1000





### Visions of Easy Riches Brought Thousands to the Forbidding North

Men of every type from every part of the world fought for space on ships. Some came up the Yukon to Dawson from the Bering Sea, many challenged the rugged passes above Ithra and Skagway, seeking to find the answer



World War II, when it did a heroic job of hauling men and supplies to the Alaska Highway.\*

As we crawled up the mountain side, up one of the world's steepest railroad grades, I saw that the trest had been blasted out of solid rock. Chuck told me the work had been done by one of the fanciest construction gangs in history, disilluminated stampedeers, including lawyers, doctors, artists, teachers, farmers, bankers, and bookkeepers.

As the train chugged up the last 20 miles to the summit, I spied my friend, the old prospector, luxuriating in the parlor car.

"This is comfort," he said, flicking cigar ashes grandiosely into the aisle. "Look me a month to relay my grubs to the summit in '97." The trip to the summit and all the way toward Whitehorse, Chuck reminded us, would take just six hours by train.

At the top of White Pass we read a sign on the International border. It explained that on the Canadian side the waters flow 2,150 miles to Bering Sea; on the American side they flow 70 miles to the Pacific Ocean.

### Tall Fences and Tall Stories

Then we tilted downward for Bennett Lake. High board fences lined one side of the tracks, I noticed. They obviously were winter snow fences, but I overheard the brakeman solemnly telling a lady passenger, "Them's moose fences, ma'am. Keep moose from getting on the tracks and derailing the train."

Bennett, jewel on point of the White Pass and Chilkoot Trails, was where stampedeers built their huts to go downriver to Dawson. A roaring town of 10,000 at its peak, it's now no more than a lonely, wind-whistling ghost town.

Here Chuck and I got an old dory, *Klondike III*, and pushed off from the rotten wharf on the trail of the gold rushers. The boat wobbled like a tired accordion. Since it hadn't been used for years, water poured in through its dried-out seams, and we had to bail constantly to keep from sinking.

Fifteen miles downriver we crossed the boundary from Canada's British Columbia into its Yukon Territory, a vast region comprising 267,000 square miles of hills and mountains interlaced by large valleys. At the northern end of Bennett Lake we steered the foundering dory under a railway bridge and beached at Carcross.

Having had enough of *Klondike III*, we gladly boarded the next train to Whitehorse. Like most other Yukon towns, Whitehorse was born of, and nourished by, gold. But this town has continued to thrive, while the others languished. Always the distribution center for the Territory, as head of river naviga-

tion and terminal of the railroad, Whitehorse is now also the leading metropolis (population 4,000). The Alaska Highway and a large \$13,000,000 airport strategically located on polar air routes helped it grow and become an important military base.

Modern as it is, the town still shows many traces of the past. As I lugged my Luggage up Front Street to the Regina Hotel, a water truck, swinging its empty buckets, came clanging past me. After all these years, many pipeless log cabins and houses still buy water at five cents a bucket.

### No Time for Shoelaces

Most business in Whitehorse is crowded into the three or four months of warm weather, and things were booming when I was there. I dropped into a shoe repair shop, where I interrupted a busy cobbler working on a mountain of old shoes. I bought a leather shoe lace to use for a watch chain. "Please put a hole in it," I asked.

The shoemaker exploded. "Here I have a thousand dollars in shoes to repair," he said, "and you ask me to cut holes in a 25-cent shoelace!"

I saw the old cabin that belonged to Sam McGee, immortalized by the Yukon's bard, Robert W. Service, in his ballad, "The Cremation of Sam McGee." Sam, facing death as he trudged the trail, had but one fear—the pain of an icy grave. Before he breathed his last, he wrenched a promise from his partner to cremate his remains. The partner complied by stuffing the frozen corpse into the blazing firebox of a derelict boat he found on the edge of Lake Laberge.

Sick with bread, the partner came back later to investigate. "I guess he's cooked, and it's time I looked."

There sat Sam wearing "a smile you could see a mile." Said he, "Since I left Plumtree, down in Tennessee, it's the first time I've been warm."

Although Service wrote raelly about "the crassest land that I know" and about its people—"in a stark, dead world, clean men for the muck called gold"—he also wrote pensively of the country's beauty. On his long, solitary rambles around Whitehorse he drank in the grandeur that most of the others spewed by. One early spring, he tells in his autobiography,<sup>†</sup> he stood on the heights of Miles Canyon, breathing in the beauty. Suddenly this line popped into his head. "I have gazed

\* See "Alaskan Highway an Engineering Epic," by Fred C. Brown, *New York Times*, March 11, February, 1945.

† See *Ploughman of the Plow* (1945), and *Harper of Heaven* (1948), by Robert W. Service. Published by Dodd, Mead & Company, Inc., New York.



on naked grandeur where there's nothing else to gaze on."

To me, Miles Canyon and the Whitehorse Rapids just beyond are the most thrilling part of the Yukon. The canyon is only 100 feet wide. The whole river, fat with the water of the upper lakes, turns on edge to squeeze through it. In these turbulent waters many stampeder boats were dashed to death in their clumsy craft.

#### Shooting the Whitehorse Rapids

Watching that wild water, I promptly determined to shoot both canyon and rapids in a canoe. The plan was announced over the Whitehorse radio and heralded as a revival of the thrilling days of '98.

Once our "paddle" had assembled at Miles Canyon and Whitehorse Rapids, Billy Goodlad, who is a Yukon River pilot, B. L. MacBrade, and I pushed off into the head of Miles Canyon. Shring off the tops of the largest breakers, I steered the lunging craft through it, what seemed like only a couple of minutes.

Below Miles Canyon, before we got to the dangerous Whitehorse Rapids, we shot the mollicking whitecaps of Squaw Rapids with ease. As we crested the big rapids three miles below, our attention was sidetracked from the leaping waves to the 500 spectators on the bank. For a second, seeing many hands in the air, I thought something was wrong. Then I saw that the hands held *cap guns*.

We are probably the only voyageurs ever to navigate the Whitehorse whitecaps paddling each with just one hand. But then, we had an audience, and what could we do but wave? In an instant we were through the breakers and around the bend, still waving as we swept downstream to Whitehorse.

There we relinquished center stage to an old river queen. We stood on the wharf as she approached. Actually, we heard her before we saw her. Puffing loudly, stemming the stiff current, the yellow funneled stern-wheeler finally heaved into view. Soon we made out her name: *Casca*. She had just come up from Dawson, 434 miles in 150 hours. Slowly we watched her steam to her berth and didn't leave till her last puff subsided like a heavy sigh (page 427).

Whitehorse is impressed by the majestic airliners and big express buses that stop there, but its heart belongs to the old-time river boats. *Casca* is one of the few survivors of scores of steamers that once plied the river. Up to 1914 there were about 250. Now there are only two in service; hence I considered it a rare privilege to be making the last lap of the gold trail on *Casca*.

On steamboat day it seemed as if half the

town had come to the wharf to see *Casca* off. Capt. Malcolm Campbell, veteran of 45 years on the Yukon, stood high in the wheelhouse, waiting with the poise that attends mastery. This was his moment (page 414).

He yanked a cord. Bells jangled in the engine room. Immediately the 20-ton paddle wheel began to revolve, and the exhaust exhaled powerfully in rhythm with the piston strokes. As if to dramatize our departure, we first moved upriver. Finally we turned and pulled downstream past the town.

As the last log cabin slid by, wilderness took over. The passing wall of spruce forests cut a jagged silhouette against the pale sky. Occasionally a short tuck of *Casca's* whistle broke the silence, signaling her passengers to the rails to view a couple of muskies swimming in the river, a black bear chomping along the bank, or a bald eagle sitting sedately in a tree. Once I thought I saw caribou swimming in the river ahead, but it turned out to be several Indians and their dogs floating on a raft.

As we cruised the 32-mile stretch of Lake Laberge, I was reminded of Chief Boss, the Indian who lived there during gold-rush days. The story goes that when a stampeder fell through the ice, Chief Boss tried to charge him 50 cents for taking a bath in his lake.

#### Cable Tugs the Boat Upstream

The section formerly known as Thirty-Mile River, between Lake Laberge and the Teslin, is the swiftest, most dangerous part of the Yukon system. We went downstream in less than three hours, but it takes nine or ten to bark the current upstream. At times it seems that *Casca* won't make it with her paddle wheels. And indeed she didn't in one section. A cable had to be run ashore and the ship literally dragged by her winch over a swift, shallow place.

In addition to shallow spots, navigation was complicated by many bends in the river and by the burden of a stern barge *Casca* pushed ahead of her, making her combined length 305 feet. As we neared one bend, Captain Campbell noticed my interest and pointed toward pilot Goodlad. From the pilothouse 35 feet above the river, Goodlad read the waters as easily as a scholar reads a book. Yet, ahead, the bow of the slowly swinging barge seemed almost ready to climb the bank, while astern the thrashing wheel looked as if it might soon be mowing down trees.

"It's a tight squeeze," said the cydram, seeing the strained look on my face. "If the barge was any longer, we'd have to jackknife it around these bends."

I could see why steamboat pilots consider the Yukon too risky for races like those they had on the Mississippi. There is room in the





### A Dawson Miner Tills His Pike to Swap Glittering Gold Dust for Cash

The miner, who is a well-known figure in the Yukon, is seen here in his workshop, surrounded by his tools and equipment. He is working on a piece of machinery, possibly a pump or a engine, which is part of his mining operation.

working on his mine here. In passing the question of an early start to work, I asked him with a hesitating voice why he did not go down the river to the mouth of the Yukon. "I need my boat," he said, "and I have no money to buy one. I have been working for some time, but I have not been able to get any money out of it."

As I sat down on the ground, I saw that he was using a funnel in pulps. By asking him to show me how he did it, I got so I could tell how the pulps were being used. A few pulps are used in the mine, but we were digging a bed of the pulps, and it meant shallow water. I was in a pulps when I was working. Fast, I was in 10 or 15 minutes, indicated deep water and a straight channel.

After getting accustomed to working by listening to the exhaust pulps, the captain told me that when they change to box is equipped with steam condensers, which don't pull, it takes a month or two for them to adjust.

Whenever Carson stopped to work up his pulps, I had to go down. I had to go down

and almost anywhere in the Territory, and there are many other assets Yukoners can shoot about. I heard a lot about some of them from one of the passengers, a Dawson woman who was coming back from her first visit to the Yukon. After a month of hearing people say so much truth, she was glad to be coming home. And now she looks forward to eating a Dawson tomato.

"Why, their tomatoes are really good," she said. "In Dawson, the tomatoes are sweet and full."

### Gardens Flourish in Short Season

Nearly every one has a garden and both in Dawson, she told me. In general, the first spring frost occurs in June, and the first autumn frost in mid-August.

But the sun shines brightly around the clock in June and July. The thermometer rises to 80 or 90 degrees higher, nothing more of the frost and providing natural irrigation. This combination of sun and irrigation makes almost every kind of flower and vegetable flourish.



Unlike flowers and vegetables, trees do not thrive in the Yukon. Except in major valleys and depressions, timber does not grow to merchantable size. Stands of native white spruce and larch take care of local fuel needs, but since 1940 sawn lumber for Dawson and Whitehorse has had to be brought in from British Columbia.

In places along the river we noticed much smoke from forest fires, many caused by careless trappers. One pilot told me that the fires affected navigation. By destroying vegetation they lessen the soil's water-holding properties and cut down the volume of flow in the Yukon, which is less than that of some other rivers its length. Now, in mid-August, the water was so low it took the utmost in skill to navigate it.

### Five Fingers Squeeze Casca

When word filtered down from the pilot-house that we were approaching Five Finger Rapids, a knot of passengers gathered around Captain Campbell. He was something of a hero to us by this time, and soon to become an even greater one.

We could see ahead four huge, tree-fringed rocks almost blocking the river. They form five channels, only one of them navigable. So narrow is the passage between the rock walls that if the wind is blowing it's considered too dangerous to make the attempt. "If a new pilot hits here," the captain said, "he generally loses his nerve. If he misses the channel the first time, he doesn't get another chance."

With that, the skipper climbed confidently to the pilot-house and took the wheel. Quickly he swung *Casca* into position for a straight run, then jammed the bell for full speed ahead. As we skimmed by the rock walls, it seemed I could reach out and touch them (page 413).

It was shortly before midnight of our second day when we tied up at Fort Selkirk, an old trading center. Here Hudson's Bay Company built a fort in 1848, but the Indians burned it down. Long noted for its numerous Malenates, it couldn't muster enough dogs of any kind now to pay the traditional howling tribute to *Casca's* whistle. All of Selkirk's population today—a trapper and five Indians—sat out on a high bank and watched us gravely as we took our word.

Presently the trapper, trailed by his big black dog, came down to greet us. He invited me to his cabin for coffee. But its way down in price, he told me, and making a living by trapping is tough. As he talked, the trapper waved his dog to the table. The dog lapped up two cups of sugared coffee and then went into his big act, eating bacon held in the trapper's mouth.

The intimacy between trapper and dog didn't surprise me. I had read more than one account of a stamper sleeping with his dog to keep from freezing to death. Often when a dog worked on an icy trail, he'd get painful balls of frost under his nails and between his pads. To thaw the paw, the dog's master would put it in his mouth, then carefully dry it off with his shirt. Many a Klondike diary has told how a limping dog would suddenly stop, turn to his master and hold up a paw.

Kirkman, with a total population of two, was the prettiest place on the river. It was almost overgrown with flowers—pink, blue, magenta, spiked here and there with yellow. Nearly 500 varieties of wild flowers, ferns, and shrubs have been identified in the Yukon, including several varieties of the orchid family. I was told that within a few minutes' walk of Dawson I could find the bog orchid, fly-spotted orchid, lady's-tresses, and calypso.

Before turning in that night, I overheard Captain Campbell say to a Dawson boy returning from school in Vancouver, "It's a wee bit of a way to Dawson now, Laddie, and there's nothing to stop us."

Lying on my bunk, I leafed through page after page of Klondike lore I had stored in my mind. I could almost feel the frenzy the stampedeers felt as they drew closer and closer to their goal. And I visualized the river banks piled high with freight and boats, scows and rafts jammed four or five deep for miles up and down from Dawson.

One look at Dawson harbor next morning, however, brought me up sharp to reality. Except for a trader's launch just in from the Porcupine River, *Casca* was all alone at the water front. The town looked as if it had curled up at the foot of Moosehide Mountain and gone to sleep, impervious even to the roar of the Klondike River, which comes snarling out of the hills to join the Yukon on the south side of town (page 408).

### Eggs Once Cost \$3 Each in Dawson

I hurried to the Royal Alexandra Hotel and had breakfast in the adjoining cafe. As I ate a couple of eggs, I recalled that in '98 eggs cost \$3 each. The "Royal Alex" still had the same old embossed sheet-metal ceiling, old-time black-leather chairs lined the lobby, and on the walls hung life-size paintings of nudes in 7-foot gilt frames.

I promised myself I would come back for a longer look and dashed to catch a ride to King Solomon Dome. There, 20 miles out of the city, 4,250 feet up, I beheld the great panorama. Here at last were the famed creeks of the Klondike Valley—Gold Bottom, Dominion, Eureka, Last Chance, Eldorado, Sulphur, Little Blanche, and Bonanza—cours-







had directed Carmack to dig on Rabbit Creek and to let him know if he found anything. Henderson, working less than a day's journey away from the strike, didn't hear of it, however, before all the good claims were staked. The Dominion Government hailed him as the "true discoverer" of the Klondike because he had been first to mine on one of its tributaries, and gave him a \$200-a-month pension.

But Henderson's pain was not assuaged. Some years later he renounced the pension and took up prospecting elsewhere. He died still searching for it.

Carmack, an American citizen like the vast majority of Klondike stampedees, drew no official recognition from either the Canadian Government or his own, but he did draw attention. He saw to that. When he took Tagish Charlie and Kate to Seattle for a visit, they blocked traffic by throwing gold coins from their hotel windows. The story goes that in a San Francisco hotel Kate blazed a trail with her knife on the stair banisters so she could find her way to her room.

Skookum Jim and Tagish Charlie were given honorary Canadian citizenship and the white man's privilege of entering a saloon, a kindness which literally killed poor Charlie. Having celebrated too much once too often, he toppled to his death off a White Pass and Yukon railway bridge.

But while he lasted, Charlie experienced no greater joy than ordering up a round of drinks for the house. Dawson afforded him almost countless outlets for joy. Every third door opened on a saloon.

#### Gold Panned from a Cafe's Ashes

When a man bought drinks he'd throw his poke on the bar. Then the bartender weighed out the gold due him on the bar scales and tossed back the remainder. A careful tender would keep a cloth around the scales in case any dust spilled, and later he'd gather up the cloth and shake the dust into his own poke. Some saloonkeepers, it's said, put molasses on the end of their whiskers to gather dust.

After fire consumed the Arcade Cafe, next to the Royal Alexandra Hotel, Harry Gleaves, who owns both, panned the ruins and made himself several hundred dollars. His hotel once housed the Flora Dora Dance Hall and the Dominion Gambling House, but now the dance hall is the kitchen of the new Arcade Cafe. Over the carved archway to the kitchen you can still make out the gold lettering: "Flora Dora" (page 405).

Here is where Nellie the Pig bit off her partner's ear for a keepsake, where Diamond Tooth Gertie danced, and Cud Wilson strided about, lifting from the weight of a \$50,000 belt of nuggets she wore twined around her

waist. Men were crazy to dance the "cow-tillion" with the girls and willingly paid \$1 a minute for a twirl on the floor.

I got a queer feeling as I clapped along the warped wooden sidewalk down Dawson's Front Street past Dance Hall Row. Building after building now was boarded up, its false front weathered gray, its roof sunken like a cadaver's cheek. For a while I thought I was losing my sense of balance, for many of the buildings appeared to be leaning at a rakish angle. I was glad to learn that the fault was with them and not with me.

Dawson's buildings go askew because the soil underneath, starting usually about 15 inches below the surface, stays permanently frozen, and the active layer above heaves and contracts as it thaws and freezes. The cost of digging foundations in the permafrost is nearly prohibitive, so people put up frame buildings the best they can. They know that ultimately the heating unit will melt the permafrost below it, causing the portion of the structure directly above to cave in.

#### Melting Holes to Bedrock

Permafrost was the scourge of mining, too. Ground nearly always had to be thawed, usually with wood fires, before it could be dug. A man set his fire at night and in the morning descended his shaft to dig out the ground thawed while he was sleeping. As tedious as this process was, it could have been worse. For had the ground not been permanently frozen, the workings would have been flooded with water. Some placer deposits lay on or near the surface, but the richest were in the bottom of the creek valleys.

Lacets, known as poor men's mines because they can be worked without expensive machinery, are found throughout the Klondike. So far, only one lode mine has been worked in the Klondike. In lode deposits gold is firmly trapped in quartz or other matrix, from which it has to be shattered

#### Yukon Stern-wheeler, Puffing Smoke, Shoves a Barge Downstream

Scores of steamers like the *Luna* led the 1900-rude Yukon waterway during gold-rush days just before the turn of the century. Prospectors, gamblers and adventurers embarked by the thousands, some at the river's mouth on the Bering Sea, others on the headwaters near Whitehorse. All were headed for the Klondike, and all had gold dust in their eyes.

Today much of the gold and most of the people are gone from the Klondike. Stampede days are but a memory. Only a few stern-wheelers remain to challenge the wilderness route from Whitehorse to Dawson, in Canada's Yukon Territory (page 410).

Five summer visitors watch from the deck of the *Luna*, river queen of the upper Yukon, pass this stream to Dawson. Members of the deck crew risk the barge loaded with oil drums and mining supplies.













# A Japanese Garden

In the garden, the trees are planted in groups, and the path is laid out in a way that leads the eye from one group to another. The garden is a reflection of the Japanese mind, which values harmony and balance. The garden is a place of peace and tranquility, where one can find a sense of calm and serenity. The garden is a work of art, and it is a pleasure to walk through it and appreciate the beauty of the natural world.





*The Whitehorse, Resting Between Trips, Calls to Mind a Mississippi River Packet*

The Whitehorse, a grand little Yankee Packet, from Portland, Maine, is now at anchor in the harbor of New York, and is the only one of the kind left.





### River Steamers Lie in the Whitehorse Slipway Like Shaved Aunes of Adventure

Known as the "Yukon Valley," the river is a main thoroughfare for the people of the north. It is a great highway for the people of the north, and the only one that can be used for the purpose.









## A Day in the Rapids Gasp at Shipping with Rocky Claves

Can you imagine a day  
when the water is so  
fast and so wild that  
the boats are like  
leaves in a storm?  
That's the picture of  
the rapids at the  
mouth of the Great  
St. Lawrence River.  
The water is so fast  
and so wild that  
the boats are like  
leaves in a storm.

The rapids are so  
fast and so wild that  
the boats are like  
leaves in a storm.  
The water is so fast  
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113

114

115

# Skipper Compater for Attention with Mudry Mouse and Long Ranger

At a meeting of the Yukon River Council, the Skipper, Mudry Mouse, and Long Ranger, were present. The Skipper, who is the only one of the three who is not a member of the council, was the only one who was not a member of the council.

# A Yippee Secretly Plays Solitaire on the Porch of His Dawson Cabin

Yippee, who is a member of the Yukon River Council, was the only one of the three who was not a member of the council. He was the only one of the three who was not a member of the council.



EDNA



loose. Placer gold, on the other hand, lies free in sand, gravel, or loose rock. Nature has done most of the reduction work; man has only to dig and wash.

In winter a prospector usually mounded up his diggings and waited for the spring thaw. During the warm months he washed as he dug. The simplest, and slowest, way to wash was in a pan or rocker, but wherever it was practical a miner used a sluice box.

There were all kinds of sluice boxes, but the principle was the same: shoveling gravel into a stream of water diverted through a series of inclined wooden boxes. Gold, 19 times heavier than water and several times heavier than rock, sank to the bottom of the boxes, where it was trapped by cross bars called riffles. By this method two partners could average \$100 a day on a rich stream.

### Hush Falls on the Rush

In October, daylight slipped away and the thermometer's mercury crawled lower and lower (lowest officially recorded temperature at Dawson: 73° F., and at Snag, 120 miles south, it is -81°, the record for all Canada). Then gloom sat on the Klondike like mountains of frozen gravel.

Out on the creeks the search went on, only now it was crazier, lonelier, stider. Through the soundless cold you could hear a man cough three miles away. Now and then a wolf howled far off in the hills or a tree split the full length of its frozen trunk, shrieking as if in pain.

Many cabins held more gold than grub, and not many held much gold. There were numerous suicides along the creeks. Some men swore they, too, would end it all, if only they could afford a rope.

Those who didn't take their lives took themselves to Dawson for relief. There they flunked to one of the saloon shows to see the most talked-of act in the Klondike.

A man mounted a scaffold, let his arms be tied and a noose put around his neck. Then the platform was shoved from under him and he dropped into space, bouncing from the jerk of the rope. As his face turned purple, the curtain was drawn.

Since a different man was selected for the act every night, the audience never knew for sure whether the victim survived.

Gambling was as desperate as the dramas. Pots commonly ran to \$5,000, and whole fortunes were lost in an evening. Except for the gentle thrums and clicks at the tables, the rest of a saloon might be noiseless. Miners drank in silence and listened long-faced to their favorite song, "Home, Sweet Home." From where they stood it was 1,700 long miles to Seattle.

It seemed nothing happened to break the pall. But at last, on October 14, 1898, it came—the big fire. Flames leaped from one under-dry shack to the next. When water froze in the fire hose, men lined up from water holes to flames, passing buckets hand to hand, and saloonkeepers passed out buckets of whiskey to keep them going. Soon nobody could tell firewater from water, and both were thrown on the flames in merry abandon. It was Dawson's first real celebration.

In two weeks the town was rebuilt. Six months later it burned again. This time, as before, the fire hose burst before a trickle could reach the flames. Today, fire chief Elmer Guardian told me, Dawson has 26 fire hydrants "all electrically heated so they won't freeze even at 74 below" (page 397).

Rebuilding Dawson after the fires gave a lot of unhappy, unoccupied people something to do. When 25,000 newcomers arrived in the summer of '98, they found they had been beaten to every creek. About the only way left to get a claim by that time was to buy one, and that took anywhere from \$5,000 for an unproved mine to \$30,000 for one with pay on it. The largest single sale of the summer, according to the *Klondike Nugget*, was \$350,000, for No. 8 Eldorado.

Worthless claims were often passed on to innocents or drunks. Charlie Anderson, the Swede, was fooled that way—or so the men who witnessed the swindle thought. Charlie, who had been working a creek far away, hadn't heard the news of the Bonanza and Eldorado strikes until he returned to buy supplies, and then it was too late. The more the boys told him of the killings made off those creeks, the worse Charlie felt—and the harder he drank. Finally, in utter despair he threw his puny poke of \$800 on the table.

In the morning when the Swede awoke, he found himself the owner of No. 23 Eldorado, which everybody knew was a dry claim. Charlie begged for the return of his poke, but a deal was a deal.

All Charlie could do now was to leg a bunk at the cabin nearest his new claim and set to work melting a hole 30 feet deep. That very first hole paid Charlie \$130,000. He took his money to Seattle, got married, came back, and dug out another \$100,000. That was in the fall of 1898.

### Men Move Out, Machines Move In

By 1899 the big rush was over. Machinery was moving in, and gravel was soon being thawed by steam points. Having skimmed the cream off the Klondike, the prospectors scattered into the wilds or stampeded to Alaska. There, it was reported, gold had been found on a beach. In the first week





Road Equipment, Brought by S. L. Leaven Shagway for the Alaska Highway

Leaven Shagway, with equipment for the Alaska Highway, is shown in Alaska's Shagway by the name of the highway. Here an automobile, a truck, and a truck full of white oil are shown. The truck is a White Eagle and Yukon Road, which is the same as the one shown in the photograph (page 377).

afterward of the Alaskan strike. Full-blown and framed 8,000 men left for the new field, leaving signs on their cabin doors: "Come to Dawson."

As the gold bulletin debated, so also did Dawson. Full-blown, it was a city of 8,000, hub of an area containing at least 18,500 more. Today her population has dwindled to fewer than 800. I saw a few prospectors still mining by hand, but since 1905 nearly all the mining has been done by giant electric dredges. And since 1932 nearly all the gold reserves have been owned and worked by one great concern, the Yukon Consolidated Gold Corporation, Ltd.

Floating in rivers three or four stories high the dredges crawl across the land like monstrous crabs, their long, curved bodies with 200-pound bucket teeth, and leaving ugly piles of tailings (waste) in their wake. One dredge processes from 2 to 2½ million cubic feet of gravel in the April-to-November season. It has to. Klondike dirt now yields only 15 to 20 ounces of gold per ton, and the

miners turned up their noses at any dirt paying less than 10¢ a pan (two shovelfuls).

Though the population of the entire Yukon Territory today is only 9,100, and though British Columbia and Quebec produce far more gold, the Territory nevertheless maintains a steady contribution to Canada's total gold production, now surpassed only by South Africa. Gold is mined in all but two of Canada's Provinces and, in point of value, is its most important mineral product.

Even little Dawson, still the center of Canada's placer mining, looks as much to the unknown future as to her brilliant past. On known resources alone, it is estimated there are enough deposits in the Klondike to keep dredges going another 30 years. And the Yukon holds untold, untapped quantities of other mineral and water resources.

Some people say Dawson is dead; others say she's just in a coma. I think she is very much alive—surely, as long as Dawson doesn't intend to let you forget about the gold spoon in her mouth. Nor does she mean to let it go



Where Camel Caravans Share Ancient Routes with Motorbuses, . . . Yankee Teacher, Wife, and Children Happily Set Up Housekeeping

By REBECCA SHANNON CRESSON

*With Illustrations from Photographs by Osborne C. Cresson*

FROM our first residence in New Mexico we traveled as a family half around the globe to live in Afghanistan and were surprised to find much in that strange setting to remind us of our former home in the American Southwest (map, page 421).

But there, in that far-off kingdom in Asia, mountains loom higher and deserts stretch wider, farmlands are painstakingly terraced. Shadows cast by mud-walled villages are all that pack them out from their brown settings; and the word for auto mechanic is "basta-car!"

When we reached Kabul, the capital and largest city, my husband started teaching mathematics at Habibia College, where some lessons are taught in English. So Osborne did not have to know Persian, though he learned Persian numbers in a hurry to check on whispered answers.

In Kabul, Persian is the predominant tongue; the ancient Pashto, or Pushtu, is used as a second national language. In the south the situation is reversed.

Habibia College is run by the Afghan Government and employs a number of American teachers in its English and science departments. Boys alone compose the student body, which has 2,600 in grades from first through twelfth. For this selected enrollment tuition is free (page 422).

Other schools in Kabul use French, English, and Austrian teachers. Kabul also has several schools for girls, though few girls seek education beyond the sixth grade, becoming at that age marriage-minded.

While Osborne taught, our 9-year-old daughter, Wetherill, and 8-year-old son, Os, went house hunting with me. During our wanderings Kabul emerged as a unified metropolis, where at first it had seemed a bewildering succession of high, plastered walls lining a confusion of streets (pages 424, 425).

#### Camels Flood Among Autos

Sometimes we rode in a two-wheeled, horse-drawn "taxi" called a *gadore*, which has two seats placed back to back over the wheels. The driver faces forward, while the passenger faces to the rear, in imminent danger of sliding off the seat that slopes downward at an alarming angle (page 426).

We grew accustomed to camel caravans plodding calmly down the street in magnificent disdain of motorcars, gadores, donkeys, and flower-painted trucks. Men ride in gadores or buses on donkeys or bicycles, or they walk. Even Americans learn to walk in Kabul, where there are few cars.

Soon after we arrived traffic flow was switched from the left side of the road to the right. For a few days a walk or ride along the streets was hair raising.

Donkey trains were especially stubborn about keeping to the left; trying to force down buses and trucks, they would stop at the very humpers with slit nostrils flaring and ears twitching in irritation. The buses were constructed for driving on the left, so now, when they drew up to the right hand curb, they discharged their passengers, perforce, into the middle of the street!

#### Rear of the Bus for Men Only

When our whole family took a bus ride, Osborne had to enter by the rear door with the other men, while Wetherill, Os, and I got on at the front with the shrouded Afghan ladies.

The *chadari* worn by the Afghan woman is a billowing, tentlike garment in a great variety of colors. A small embroidered cap has yards and yards of material shirred onto it; back and sides reach the ground, but the front section is only about knee-length and is handsomely embroidered. The long edges usually are held together in the wearer's hand, covering the short piece, which is seen only when a woman reaches out to accept change or to shake hands. She peers at the world through a lattice-embroidered rectangle across the eyes.

Men's wear is as varied as women's is stereotyped. Some men wear turbans wound around stiff embroidered skullcaps. Full cotton pantaloons and long brightly striped quilted coats complete the costume. Others wear suit coats over their pantaloons, and native shirts with long tails flapping freely. If a man is not prosperous enough to buy a Western coat, he may settle for just a vest.

In Kabul most students and government officials wear brimless karakul hats, and many wear Western dress, omitting neckties (page 426). When boys stopped at our house to





### On a Cheering Merry-ground, Rural Children Celebrate the Feast of Naumiz

As the year approaches its close, the children of the country are busy with the preparations for the Feast of Naumiz. This is a time when the children of the country are busy with the preparations for the Feast of Naumiz. This is a time when the children of the country are busy with the preparations for the Feast of Naumiz.

They are playing games and making snow globes. They have made snow globes and are playing games. They have made snow globes and are playing games.

They are playing games and making snow globes. They have made snow globes and are playing games. They have made snow globes and are playing games.

#### Big Windows for Winter Warmth

In the last few years, the children of the country have been making big windows for winter warmth. They have been making big windows for winter warmth. They have been making big windows for winter warmth.

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### In Crowded Buses Like This, an American Family Toured Mountainous Afghanistan

To escape from its jam-packed interior passengers rode on the roof of the bus. One of the wives of the author is seen in the foreground. The bus is a Soviet-made vehicle, and the number 1186 is visible on its side. When the bus reaches the Afghan border, the passengers are met by a group of men.

served umbrellas with the soap at a spring dinner party.

We grew completely philosophical about cold. We just moved the furniture out of the way and, after the rain, simply waited for the floor to dry.

Wooden flooring is common in most Afghan houses. They mix a lot of mud and straw, plaster it, and with a few bits of splintered wood planks, construct floors easily as good as a cork. A coating that wears out in no time if the floor isn't covered with rush or straw matting, rags, or carpets. Halls and bathrooms, on the other hand, often are floored with stone, brick, or marble.

The one place where the floor is extra-

ordinarily smooth is the kitchen. There's no reason they do not do this when subjected to leaks and occasional mild earthquakes.

Most of the new-type furniture expressed in elaborate designs, including the doors and designs. Usually they are varnished, but sometimes painted. The most startling example of our experience was a room with a plaster ceiling and walls, with a pink water paint on the wall. We always wonder that house after all, we could use the violently colored room for a bedroom and go into it only after dark!

Wide hallways connect the living rooms from bedroom to bedroom. The wife or wives retreat when the men sit at the table, and





429

### Autos Are Few in Afghanistan's Capital; Two-wheeled *Cholers* Take Their Place

For several years the only means of transportation in the city has been the *choler*, a two-wheeled vehicle which is still in use today.

cars. In larger towns there are a few motor cars. On a few occasions Autos were appeared when the husband was away but they were not there when I was here last time in August.

In some of the houses the women are a little more the women than men but most of the days waiting to get the men to go home who was showing the ground. They are not allowed to go out the women were not supposed to go out the house we were in. They are not allowed to go out the house we were in. They are not allowed to go out the house we were in. They are not allowed to go out the house we were in.

In Afghanistan the women have no wives, but in some of the houses the women are a little more the women than men but most of the days waiting to get the men to go home who was showing the ground. They are not allowed to go out the women were not supposed to go out the house we were in. They are not allowed to go out the house we were in.

House in which the Afghans are furnished

with the best of the food and good furniture. The women have the men but they are not allowed to go out the house we were in. They are not allowed to go out the house we were in.

There is a lot of water in the city. The water is not good but it is not bad. The water is not good but it is not bad. The water is not good but it is not bad.

### Hot Water Hoarded for Shampoo Day

When hot water was rationed, we all took showers in the morning. Our first shower was well enough except that the water was not hot.

Then in the evening. When his turn came he discovered that the water was not hot. The water was not hot. The water was not hot.





### Landlocked Afghanistan Sits in One of the World's Hottest Hot Spots

With Russia and Soviet China to the north and east, Iran to the south, and India and Pakistan to the south and east, Afghanistan is a classic example of the independent buffer state.

more water into the supply tank and re-establish the proper course of the hot water.

The well went dry regularly every other day for six weeks, and mud collected in the tank and connections. Finally we had to bicycle-pump the pipes to blow them open before we could take a bath. After a year with the gorgeous, erratic plumbing, we left the house it glorified for a larger one, with a bigger garden, tin-pipe plumbing, and less rent.

A few houses in Kabul are now being built with indoor kitchens. One house we know of has a kitchen adjacent to the dining room; but, to reach the dining table, food must be carried out the kitchen door, along a path half the length of the house, into the main hall, and thence into the dining room—all because there is no connecting door between dining room and kitchen. Step saving is not yet a concern of most Afghan builders.

In our new home the coalhouse was just a few feet from the dining room. It boasted an elegant wood- and coal-burning iron stove plus the usual charcoal stove, which is little more than a mud shell with four holes in it.

How Nabi, the cook, produced a blazing charcoal fire in a few minutes remains a mystery to me. Yet, with the dexterity of a juggler, he broiled, stewed, and baked over those four holes. Nabi liked to use the pressure cooker, and I worried a little about his gay unconcern lest the cooker blow up with too hot a fire. I soon ceased to marvel at the incongruity of a pressure pan on an age-old charcoal stove.

No such thing as a sink graces the usual Afghan kitchen. Its substitute is a square stone on the floor with a raised edge around it. A water pipe or a water bucket, a galvanized tin tank with faucet. Though we provided a large kitchen table, dishpans and drain trays still sat on the floor during dishwashing.

The cook crouched on his haunches or sat on a low bench to prepare the vegetables. He would drop potato parings on the floor when my back was turned!

"I hush, I sweep up," he reassured me.

Nabi was a blessing who came to us as our helper before we had even found a house.





Lyons' Hudson College Lacks Heating Facilities, No Midwinter Vacations Are the Rule

Samuel J. Am... Hahnemann, who died in 1791, Hahnemann had developed a system of medicine...  
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...in the... of the... Hahnemann's...

He could neither read nor write. His English was not too good, but still I was not quite tall, he taught me a few words which I later discovered were very common. I had a lot of the money I thought I was borrowing. But Said was honest, good natured and cheerful. He never borrowed our things and he gave a hard bargain for us in the markets.

Nabi is clearly an outcast under medium bright light, nervous. Agitated. Moves poorly in the working tank. Possible. Moves and is stronger and has a more pronounced dark line along the length of his body. Very general. More more similar to others. Large dark eyes and, very even color. Dark hair. Almost all

Можно также заметить, что ввиду того, что  $\mathcal{H}^1$  — банахово пространство, то для любых  $f, g \in \mathcal{H}^1$  и  $\alpha \in \mathbb{R}$  справедливо равенство  $\alpha f + (1 - \alpha)g \in \mathcal{H}^1$ .

Noble was a very fine and capable administrator and leader; he put the best of his faculties into the budget and revenue work and into organizing the department. He could be patient, as well as energetic, and was a distinguished debater. He was a good leader and a good man, a capable thinker and a first-class type of man.

## Burger Charles Henry Cook

One day Nelli and her husband found a small black dog who crawled up his back the way people do when they are scared and barked like a cat.



unpainted wooden frames decorated with bands of color applied with crayons. Woven rush frame forms the "springs." With cotton-filled ticks for mattresses, they make surprisingly comfortable beds.

We decided to use narrow *charpi-ee* for sofas too. Osborne measured the necessary dimensions, knotted a string at the proper length, and sent Nabi off with it to the bazaar. When the "spring" frame was delivered, I sat down on it. My toes barely touched the floor! Osborne measured the legs (of the bed) and called Nabi.

"This is two inches higher than I specified," he stormed.

Nabi laughed and shrugged his shoulders. "I donna, Subh," he said. "I tell the man, but he say the string is wrong. He sit down like this and measure."

And Nabi demonstrated how the man had knotted on air and measured from the seat of his pants! The man must have had long legs!

### Swedish Modern, Kabul Style

Much of the furniture in Kabul bears a strong resemblance to the dark mission designs of some 40 or 50 years ago. One day, however, we spotted a hand-finished armchair in a cabinetmaker's shop. It was barely wide enough for me to squeeze into, and the back leaned forward instead of backward.

We have friends who are broader than we are, so we explained our requirements in breadth and proper tilt. The whole family contributed suggestions in Persian. At last, four rather Swedish modern type armchairs arrived, with side chairs and tables to match. We kept them shiny with shoe polish, furniture polish being unavailable.

When we began our home school, attended by W. and I, Os, and two small French boys, I found I would not be able to teach and do the cooking as well. Nabi stepped into the breach, declaring he would like to learn how to cook, so we had to acquire a new houseboy.

Rather, we took on a procession of houseboys in swift succession.

First came Mohammed Noor, a youngster who had never worked for foreigners. He had off-the-face ears that held up an expressive turban. Deep in thought, he tilted the turban over his eyes so he could scratch his shaved head. On the verge of striking a bargain with us, he pushed the turban to the back of his head so he could scratch his forehead.

Abdul Jamil was a laughing, bustling individual whom we enjoyed, but he went off on a protracted spree. Sayad Sarwar wore a *casaca* and lasted only four days. Abdul Ali stayed even less time. "You don't want tea, do you?" he challenged our guests.

Mohammed Saloom was a nice gangling boy who asked in pantomime if, in the Afghan way, he should bring water pitcher and bowls for hand washing at mealtime. I told him we would wash in the bathroom. So after Osborne he trudged, to watch openmouthed while my husband washed his hands.

Saloom was unwilling to stay alone in the house when we went to Iran with Nabi, so Kurban Ali came to take his place. Having previously worked for foreigners, Kurban Ali realized we were strange people who ate with forks instead of fingers, who cringed at flies on the food, and considered irrigation water in which our neighbor might have washed his feet, unfit for drinking.

When our landlord's wife died, we almost felt a part of the funeral. Their small house was only a few feet from our back windows, painted over so our servants and Osborne could not look out at the women in the landlord's company.

We truly sorrowed with the bereaved husband, for he seemed devoted to his wife, an *avidha* for several years. From the moment of death, members of the family lamented and prayed, and sobbed all night. Even the little children joined in. A crescendo of wailing the next morning warned us that the body was being taken away.

Because the landlord was a wealthy man and of position in the army, a hearse, instead of the usual *charpi-ee*, bore the body to the graveyard next day. Only men went to the service at the mosque and to the interment. The women stayed at the house; not until the men returned did the wailing cease.

### Mourning Lasts for Forty Days

For three days the relatives gathered, talking, eating, and sleeping, with occasional outbursts of wailing. The family feasted each Thursday, the night before the Muslim day of worship. Forty days after the death there was a final gathering of the clan, with great feasting—and the mourning period was over.

Afghans do not reverence the dead in the same way that Westerners do. Their graves are simple holes into which the cloth-wrapped body is lowered, then covered by stones and earth. Sometimes a small stone is placed at head and foot to mark the grave, but a formal tombstone or other identification, rarely.

If a natural route for a new road runs through a graveyard, the graves are leveled and no one bothers to move the bones to other locations. Ordinarily Moslem graveyards are inviolate.

A happy event for me was a visit with a newborn baby. The young parents had an apartment in the large house of the wife's family.



for Kohn and Lave,  
 a House With Windows  
 in Arab Street, London

*[The page contains faint, illegible markings or bleed-through from the reverse side.]*

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Only Water Is Needed  
to Make This K. Oil Soluble  
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From Half a World Apart, These Friends Laugh at Barriers of Language and Dress  
 Winifred Cresson (left) happily adopted Afghan customs and embroidered shapely vest and soft leather boots  
 Her brother Oly (right) wears Afghan dress as does Afghan student Ezzam

I found the pretty young mother bedecked with ruby earrings, beads, and rings. An embroidered white-silk counterpane covered her bed. The baby's swinging metal cradle was draped with a silk net and filled with elaborately embroidered pillows. Afghan women do exquisite needlework.

#### Newborn Baby Wears Mascara

The baby, as yet unnamed, was a tiny, swaddling-wrapped bundle with long black hair. Mascara lines drawn around her eyes came to long points at the corners. When her mother unwrapped her, it was some moments before the infant realized she could move the tiny arms that had been bound so tightly to her sides.

Babies stay in swaddling clothes for six months; then, if they are girls, they are dressed like their older sisters in short-waisted dresses with white pantaloons (page 418).

Boys wear miniature pajama-like suits. Practically every child, and many men and women, wear small silver boxes with verses of the Koran inside; children often have a whole row of them strung across their chests.

Some days after a baby's birth the father gives a party. He entertains the men, while the women gather around the mother and child. Each person suggests a name, and the mother chooses one. If father approves that is the child's name. Registration of a baby's birth is seldom performed.

"How old is your little brother?" we ask the older of two children.

"Nine years, maybe seven" comes the nearly inevitable answer. "I don't know. My mother doesn't remember."

Every man hopes for sons, but daughters are petted and spoiled just as much as boys. Afghan men are devoted to their children; it is common to meet them waiting the street,



child in arms, or to see a shopkeeper tending his child as well as his store.

Traveling about Afghanistan, we have seen how many different tribes make up this small nation. Their dress, their faces, and their dwellings all vary.

A holiday before the annual *Jeshan* gave us a chance to go west to Bamian, where two colossal ancient statues of Buddha are carved in the cliffs\*. We arrived at night as one always seems to in Afghanistan (page 429).

Startling was the sunrise in the morning as the sun rose over the valley. From our hotel windows stretched a patchwork of varying shades of green and yellow. Below us a farmer squatted at the edge of his wheat field, cutting the ripe grain with a sickle. Farther off I could see a straw stack; beside it cattle tramped around and around, threshing the wheat.

Women were bright spots of red in brilliant shawls and ankle-length bloomers. They do not wear the chador at Bamian; passing a man, women merely turn their backs or pull a corner of their shawl across their faces. Here in these rural districts are seen bands of coins across foreheads, long bell-shaped earrings, numerous silver necklaces, and coins sewn to dress borders.

A handsome mid-be-aged guide opened the gate so we might climb up and stand on the head of the taller Buddha. From that perilous perch we could admire the painted decorations on the inner wall of the statue's niche.

I confess I did not fully appreciate the murals nor the view across the valley to the snow-covered Koh-i-Baba. My stomach kept knotting uncomfortably until we got the children back to safer regions. Despite that distracting concern, however, I still find those delicate drawings and that peaceful scene clearly etched in my memory.

#### Tears Flow from Lifeless Dragon

Wetherill and Or enjoyed clambering along the spines of the "Dragon," a high hill that really does look like a two-headed dragon. A mineral spring drips tears from one eye.

Best of all we liked the sapphire-blue lake located about 50 miles from Bamian. No clear is the water that you can see the fish you don't catch; a stone seems to sink in slow motion, so fast can you follow its descent.

Nomads were beginning their southward trek toward winter pastures. Their black felt tents were folded and packed on camels. Tied down atop the loads were assorted lambs, chickens, and babies. The animals were led by women, padding along the roads in bare feet, dust coating their dirty black clothes. They seldom bothered to pull their head

shawls across their faces. Nomads are an independent people, proud and respected. A city man speaks with pride of the grandfather who was a nomad.

Back in Kabul, streets were bright with banners for *Jeshan*, the Independence celebration. Though Independence Day is May 27, Afghans celebrate it for a week in August because the flowers and fruits are at their best then.

Shopkeepers had tacked costly rugs at their doorways and draped lengths of silk and cotton cloth around them. Pictures of the King were much in evidence, and lights were strung across the main street. The avenue near the *Jeshan* field was gay with streamers of the black, red, and green national colors. A multitude of lights made it as festive as a carnival. During the celebration our house lights dimmed because the public illumination put a strain on the supply of electricity.

#### Soccer Teams Play in Bare Feet

Hockey and soccer games went on day after day. Osborne, a former soccer right wing, shuddered when the players came on the field in bare feet.

Dancing groups performed the national dance, the *attan-i-mell*. Men moved in a large circle, executing the same figure over and over—clap, bend, twist, toss the head, whirl around. The dance makes something primitive inside you go thump-thump.

Rams battled, men wrestled, and the American company added a comic touch when nine untrained men played a game of baseball with Habibia College boys. The Americans had more sense of humor than ability and lost glotiously, to the delight of their youthful opponents and the crowd's amusement.

A parade was the main event. In a shiny Rolls-Royce the King rode past the pressing crowd and the paydurs sheltering members of the foreign colony. As he reviewed the army, airplanes swooped overhead. Little cadets tried to goose-step in boots so big they could scarcely lift them.

Habibia College has school sessions all summer and, in compensation, a long winter holiday. People thought we were foolish, even crazy, when we decided to take the children on a long trip by Afghan Mail bus.

Several writers have told of safaris by Afghan Mail. Our story is quite different and more enthusiastic. Rough going it certainly was at times, but after a few days our bodies became adjusted as our minds became engrossed in the passing scene. All of us found the journey most enjoyable.

\* See "Back to Afghanistan," by Maynard Owen Williams, NATIONAL GEOGRAPHIC MAGAZINE, October, 1946.



Safely embarked, we soon became acquainted with the other passengers. The two wives of Mohammed Khan, a fellow traveler, offered us home-baked sweet bread and advice. Whoever knew English or French polished it up, the better to instruct us. Those who spoke no foreign language patiently taught us new words in Persia.

New acquaintances leaned on our knees in order to hear above the creak and rattle of the bus as we sang rounds and plantation songs. They applauded vigorously and sang Afghan songs for us.

Young Os had been primed to accept a few of the unwashed raisins so often offered to him and to store them quietly in his coat pocket. One day he leaned over and whispered, "What can I do now? All my pockets are full!" He solved the problem later by dispensing the raisins to new fellow travelers when we changed buses.

If we still were riding along when night came, the passengers shuffled themselves and their bundles to make comfortable nicks where Wetheril and Os might sleep. They don't object if a foot contentiously stretched across their laps or poked their ribs.

#### Pilau: Rice with Meat and Caramel

Wetheril lost interest in tea, and I was glad to pass up hard-boiled eggs for a while. Our daily diet could usually be supplemented with washed raisins, dates, pomegranates, and walnuts, so that even six weeks wasn't unusually long to be subjected to the monotonous fare of the roadside trattorias—*man ul pilau* or *chubut*.

Nan is a flat, platter-shaped whole-wheat bread—tasty, wholesome, and eaten in large quantities by Afghans and Russians alike. Chubut is a dish of rice and fat from the fat-tailed sheep, with boiled meat buried in it. Pilau has caramel added to the rice during the cooking and has meat buried in it also. Some kinds have a stew along with the rice—sometimes raisins, sliced carrots, and almonds are mixed with the rice. It is delicious.

At Herat we saw the crumbling minarets of an ancient mosque and the exquisitely tiled towers of a newer one. Such thing indicates Herat's long subjection to Persian influence.

Herat's people still wear huge karakul hats, knee boots of soft black leather, and short quilted coats belted instead of loose. Houses are separate beehive-shaped adobe structures, seldom are they clustered within walls, the common practice in the north and east. Some are scattered singly across the plains.

The southern city of Kandahar enters the region called by many the home of the "real Afghans." Kandahar, at a lower elevation, is much warmer than Kabul. We looked over

low walls in front of white stucco houses to admire wide porches, beautiful gardens, pomegranate trees, and grapevines. The "purdah wall," to hide women from view, is at the rear of the house. Yards are much larger than in Kabul, giving Kandahar a more open and modern look than the capital city. Actually, it is much less cosmopolitan.

#### Handiwork with the Help of Feet

Walking through the bazaar with a train of curious followers, we saw a man working a wood lathe. He pulled a bow to make the wheel turn, guided the wood with his work-flattened big toe and carved shapes with a tool held in his left hand. A helper, also working with hands and bare feet, smeared crayon on in gay stripes and polished the color with wood shavings. Os was delighted with the little spice boxes they made; he uses one for his tacks and screws.

Women with black shawls and embroidered white face shields tied around their heads and hanging to their waists turned to stare at us.

The city of Ghazni, in spite of its age and streets too steep and narrow for a car, has more of Kabul's worldliness than Kandahar (page 432). Foreigners do not attract quite as large and inquisitive a following. Bazaar men aren't too surprised, even when a family of four purchases three brass huddle-able pipes.

One pipe per Afghan household is usually considered sufficient, for a puff or two is all anyone takes at one time; a single filling of tobacco will be adequate for family and guests. Our intention to make the pipes into lamps might have astonished the merchants but Ghazni men just smile indulgently.

In retrospect, as in actuality, our Afghan Mail journey was a great success.

During the religious holiday of Ramadan we journeyed to the far northeastern province of Badakhshan. When people heard of our plans, they opened their mouths—and quietly closed them again, recalling that we had enjoyed our winter trip.

Transportation was our problem, because of an acute gas shortage. As it turned out, we rode as far as Khanabad in an army lorry going north for rice.

Across the plains we bounced to Charikar, up countless curves to Shikar Pass, through a narrow canyon, and down the far side of the great Hindu Kush mountains. Beyond the green valley surrounding Doab Mekh-i-Zarin we crossed a region of rice fields, then drove miles across brown prairies, pasture for cattle and sheep. At last, by a bare brown ridge, we came to Khanabad.

The tall, husky young governor (*bukim*) of Khanabad is a cousin of Izma'ili, a student





### Sightless Images Tower Over Marshland From Lands of Banian Valley

An old woman, a child, and a dog are seen in the foreground, looking out over the marshland. The woman is standing on the left, the child is in the center, and the dog is on the right. They are all looking towards the right side of the frame, where the marshland extends to the horizon. The background is a vast, flat landscape with a line of trees and a small building in the distance. The overall scene is desolate and expansive.





### Conealed Under a Blanket, a Charcoal Burner Warms Boy Barber and Customer

Though Kabul has many shops and workshops, some Afghan barbers must be content to squat by the roadside. This teen-ager places his razor in an open-fronted canister. Winter days are cold in Afghanistan. The holiday changed weather warms bare toes while shavers huddle under a blanket.

wasn't even winter. The governor of Wardak and Oshtada are not far away and enter Kabul as with a triumphant march. The streets that were dark and empty now are full of people.

### A Feast of Novel Delicacies

The table was set with handsome Chinese porcelain flower vases. Several foods were served that were new to us and proved delicious: paper-thin, plate-shaped waters of fried dough with bits of spinach and chives rolled into it, a thick whole-wheat pastry, and black "king" mulberries so juicy we couldn't eat them with our fingers. The hakim's mother, wife, and sister joined us, though we were not dining with them. Every evening of Ramadan, Moslems fast from just before dawn until after sundown.

The good-hearted governor helped arrange our progress toward Faizabad; he phoned the "small" governors of Tadjikistan, Herat to expect and assist us.

At Kandahar there is a cotton mill and a small pottery plant, the latter powered by a diesel engine. The mill is one of the best in the country. After visiting Kandahar we clattered back to Kabul and on to Tadjikistan in a rickety lorry with a barefoot driver. A Tajik Osborne inquired about a track to take us on to Faizabad.

"We are waiting for the lorries that went up to come back," was the reply.

"When did they go?" Osborne asked.

"One went a month ago."

"And the other?" Osborne persisted.

"Oh, that one left three months ago."

So we did not wait for the lorries.

The governor of Tadjikistan was as far as his mine. This gentleman is a son-in-law of our travel companion Fozdar. He took us up the hill to see the mine.

Workers ran to greet him. Half kneeling, each one took the boss's hand in both of his, kissing it. They seemed genuinely glad to see





41

### American Youngsters Quickly Learned the Tricks of Haggaming in Kabul Bazaars

Our new friends in the capital of the Soviet Union were very friendly. We had many opportunities to see the city and to see the people. We had many opportunities to see the city and to see the people. We had many opportunities to see the city and to see the people.

and were placed as children with the parents as he had sought to protect their lives from being killed.

I was told that an hour to cut a block of wool was by hand. The blocks go by truck to Kabul or by rail to a nearby town where the wool is sold. It is a good thing.

From the said mine we rode horseback to Mashaad. Beyond, six mountain passes intervened before we saw the little town of Faizabad, clinging to a mountainside on a bend of the Kokcha River.

#### Os Explains His Weariness

The governor of the district was not kind. We were in his office and he asked us to go to his office with him on the horse. He had a garden.

We were very tired and asked for a horse. I have a horse and a horse. I have a horse and a horse.

But we had a horse and a horse. I have a horse and a horse. I have a horse and a horse.

After tea, ending the night. We will go to sleep, too. The governor, unbothered, had servants carry the bodies of the men. Then he invited us to dine with him again on the night. That time both governors were able to stay awake.

In the Faizabad bazaar we found much soft, angel-like wool. A white wool coat Osborne bought me and a red coat. I have a white wool quilted coat. I have a white wool quilted coat. I have a white wool quilted coat.

I have a white wool quilted coat. I have a white wool quilted coat. I have a white wool quilted coat.





432

—The Author—

### Money Changes Hands Beneath the Towering Mind Gates of Ghaza

The money of America and England is a part of our row, with the other things that are used to buy things that we need and want.

It is a kind of wood and fire. There are others. This gets to be a very hard way to live, and it is not a good way to live. The first time, I was very sad, and I was very angry.

A very fine man, the first time I saw him, he was a very fine man. He was a very fine man, and he was a very fine man. He was a very fine man, and he was a very fine man. He was a very fine man, and he was a very fine man.

#### Good to Get Up and Walk

When the first time I saw him, he was a very fine man. He was a very fine man, and he was a very fine man. He was a very fine man, and he was a very fine man. He was a very fine man, and he was a very fine man.

It is a very fine man, and he is a very fine man. He is a very fine man, and he is a very fine man. He is a very fine man, and he is a very fine man.

He is a very fine man, and he is a very fine man. He is a very fine man, and he is a very fine man. He is a very fine man, and he is a very fine man.

After the first time I saw him, he was a very fine man. He was a very fine man, and he was a very fine man. He was a very fine man, and he was a very fine man. He was a very fine man, and he was a very fine man.

When we first saw him, he was a very fine man. He was a very fine man, and he was a very fine man. He was a very fine man, and he was a very fine man.

#### INDEX FOR JANUARY-JUNE 1953, VOLUME READY

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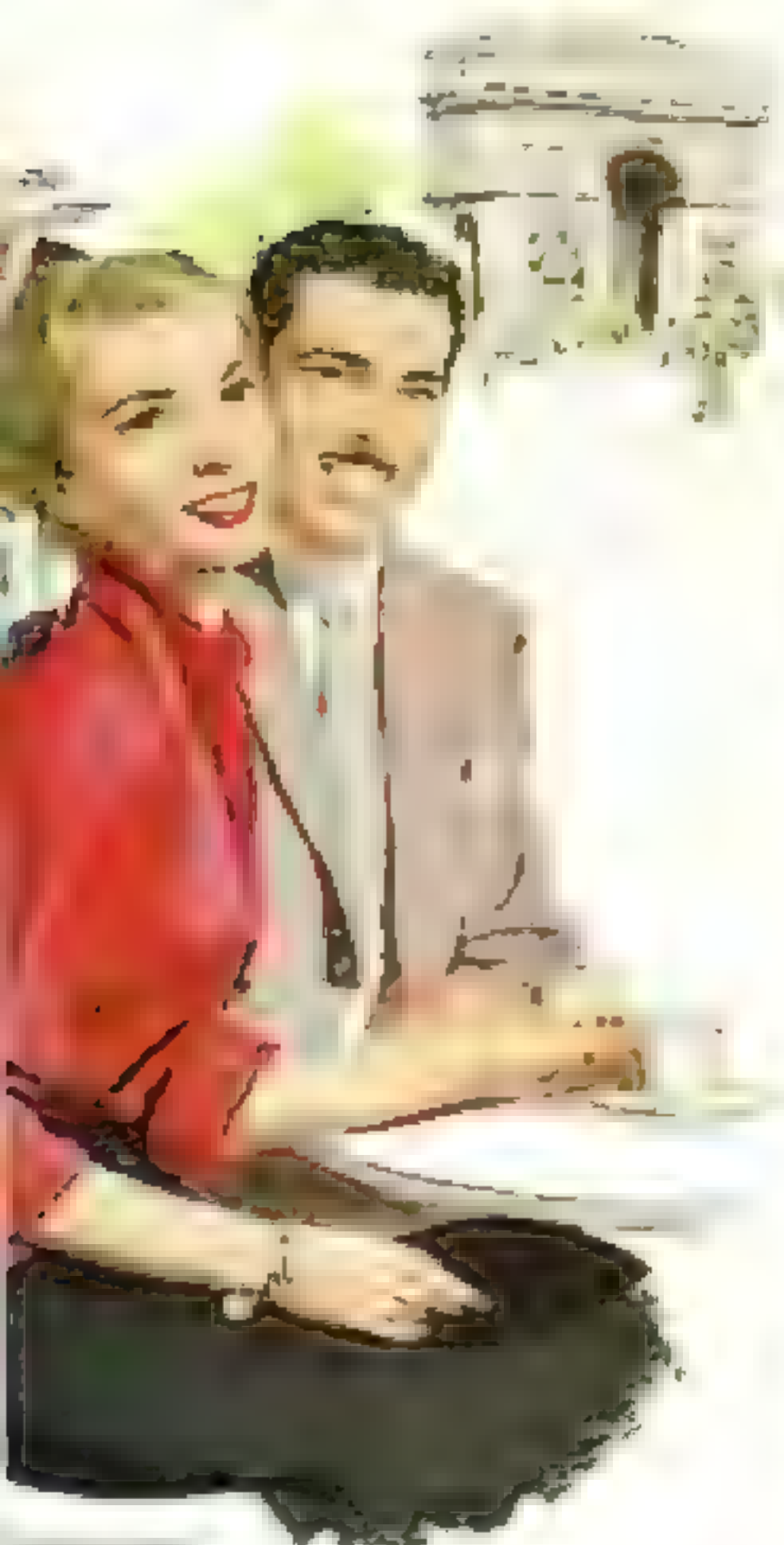
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We spent 14 days in Europe. I was so busy with my work and money, with my family and home, I had never had time to plan a vacation.

We were so busy with our careers, we had never had time to plan a vacation. We were so busy with our careers, we had never had time to plan a vacation.

everywhere and did everything. We were so busy with our careers, we had never had time to plan a vacation.

We've been busy almost a year now, and we're still taking about the wonderful holiday we had. In fact, we've started to plan the next



one. We've been busy almost a year now, and we're still taking about the wonderful holiday we had. In fact, we've started to plan the next

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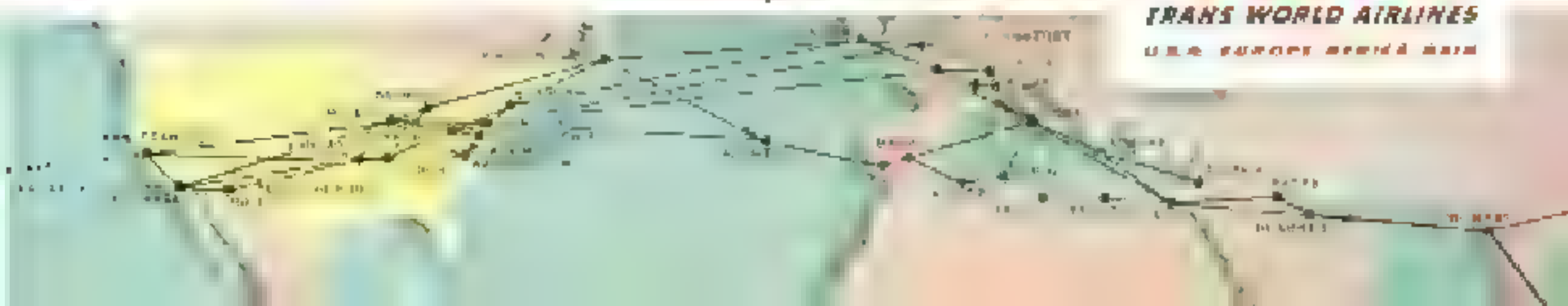
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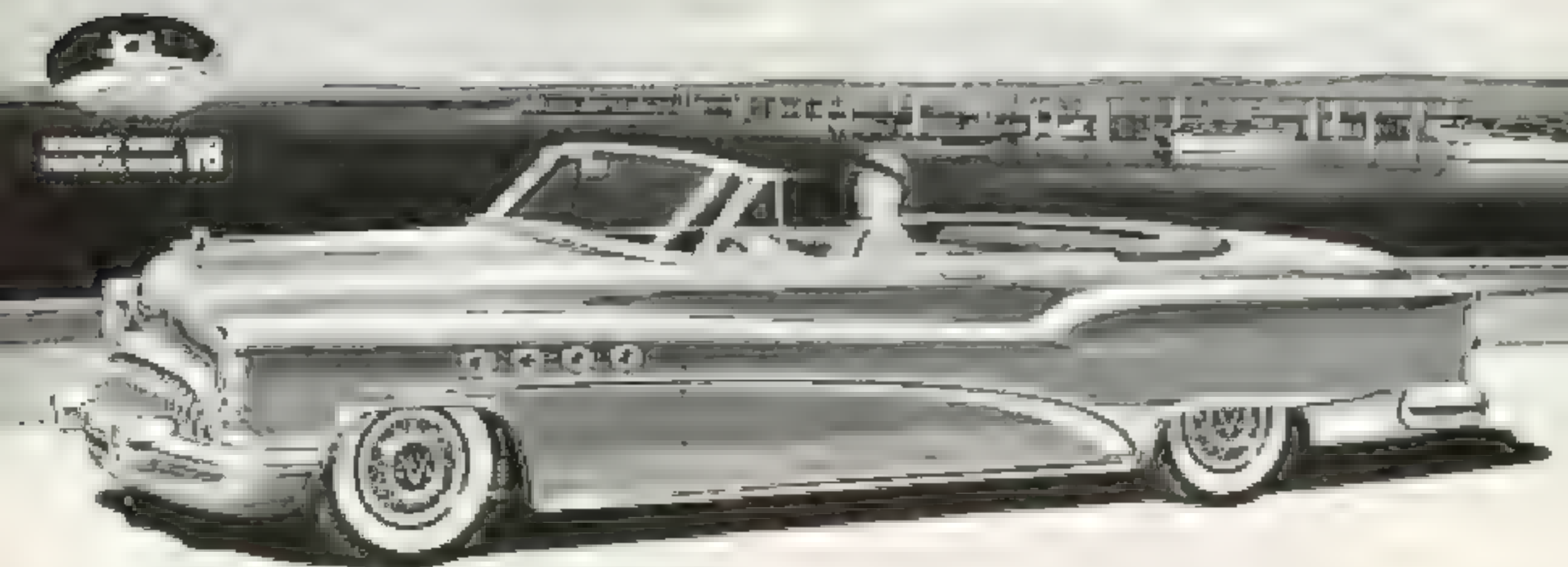
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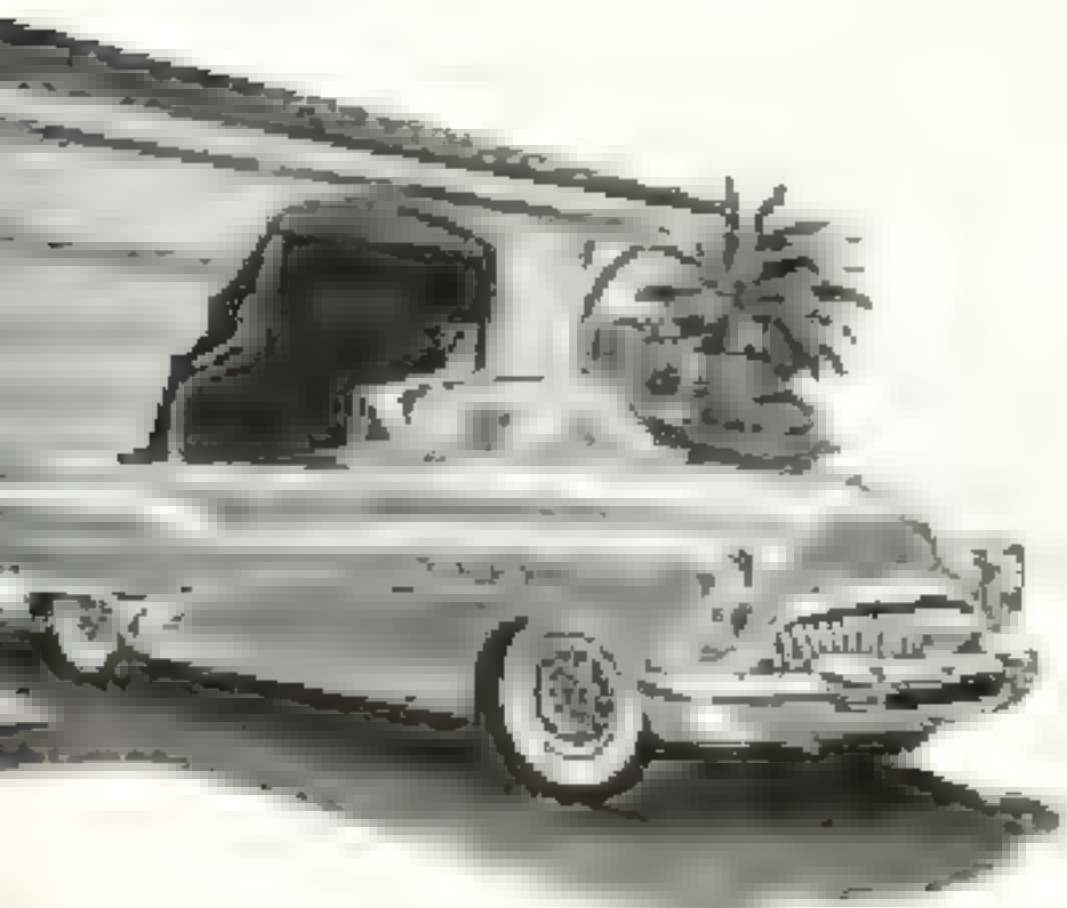
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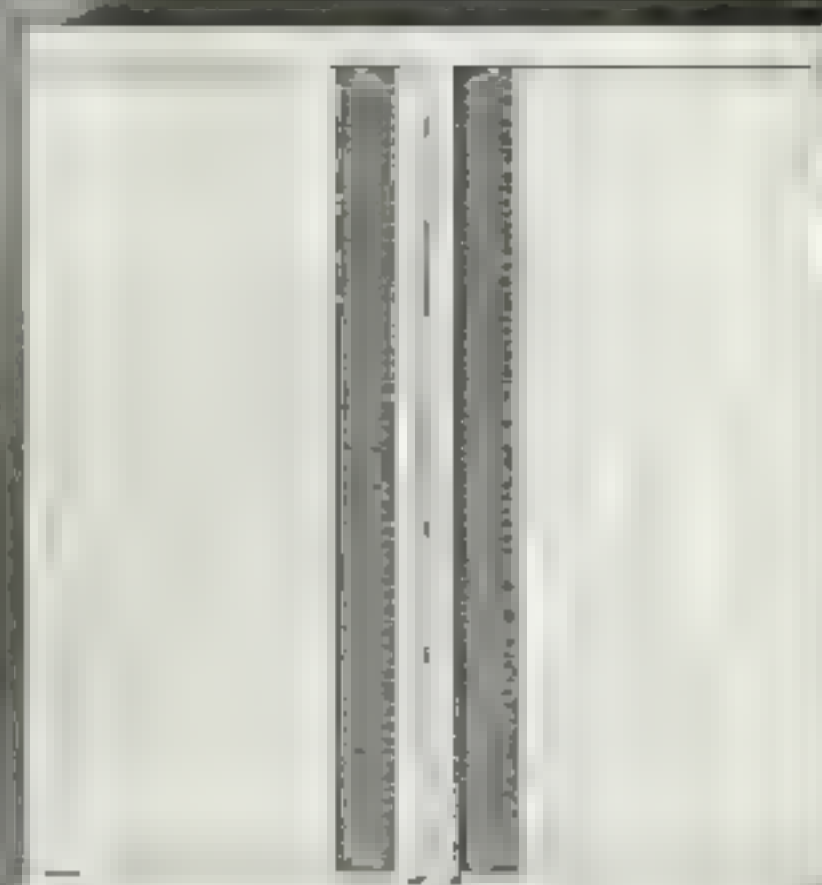
## **ROADMASTER**

*Cable Buick* **BUICK**

When better automobiles are built Buick will build them



# DuMont Television



**SIN HONG [SUNG-HWANG] CHEN**, *Ph.D., University of California at Berkeley, 1986; M.S., University of California at Berkeley, 1984; B.S., University of California at Berkeley, 1980.*

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11/11/2019

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**FIRST** & **BEST** FIRST & BEST

1. Subject: Mr. [REDACTED]  
 2. Reference: Mr. [REDACTED]  
 3. Date: 10/10/1964  
 4. Time: 10:10 AM  
 5. Place: 1010 10th St. N.W.  
 6. City: Washington, D.C.  
 7. State: D.C.  
 8. Country: U.S.A.  
 9. Address: 1010 10th St. N.W.  
 10. City: Washington, D.C.  
 11. State: D.C.  
 12. Country: U.S.A.  
 13. Address: 1010 10th St. N.W.  
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 96. Country: U.S.A.  
 97. Address: 1010 10th St. N.W.  
 98. City: Washington, D.C.  
 99. State: D.C.  
 100. Country: U.S.A.

From the above, we can see that the proposed algorithm can effectively reduce the number of iterations and improve the efficiency of the algorithm.

NAME \_\_\_\_\_

AEP 55

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STATE

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by the motion picture which is now being  
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 Tues. 10  
 Wed. 10  
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3.  $\mathcal{C}_1$  is a  $\mathbb{Z}_2$ -invariant of the  $\mathbb{Z}_2$ -action on  $\mathcal{C}$ .



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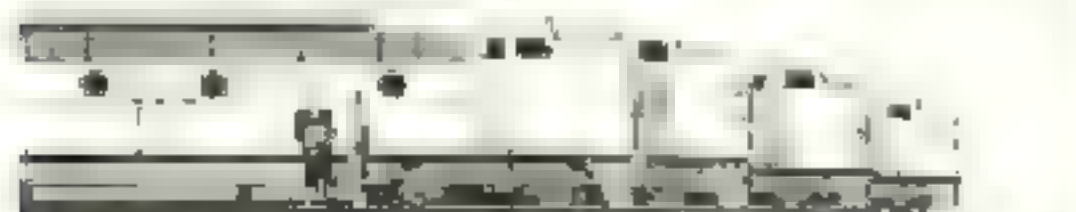


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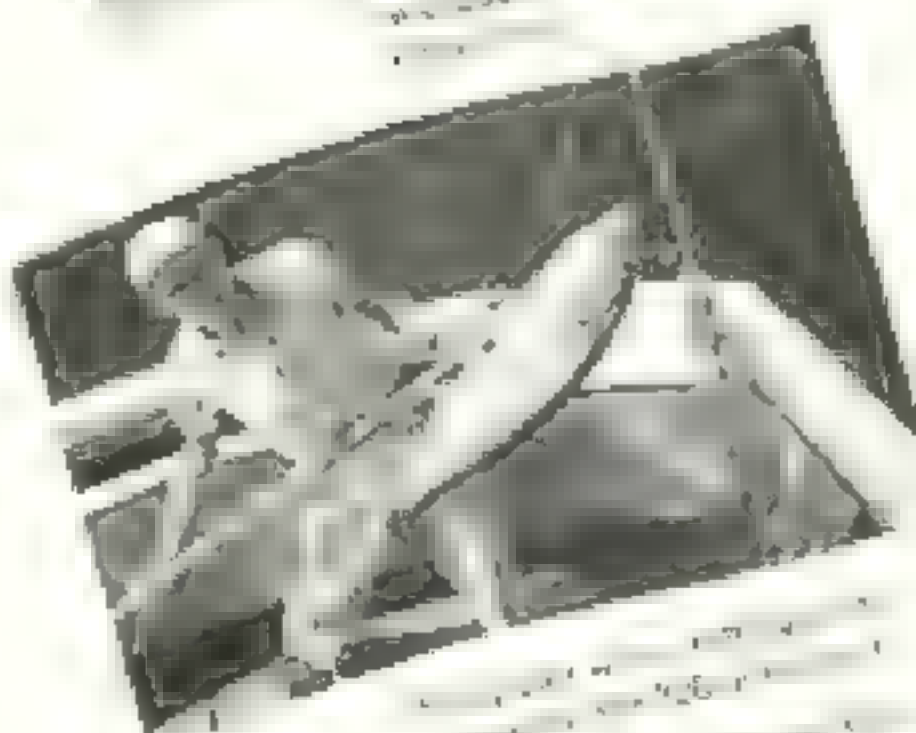
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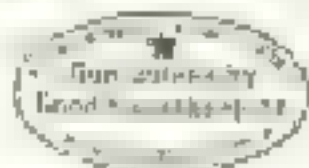
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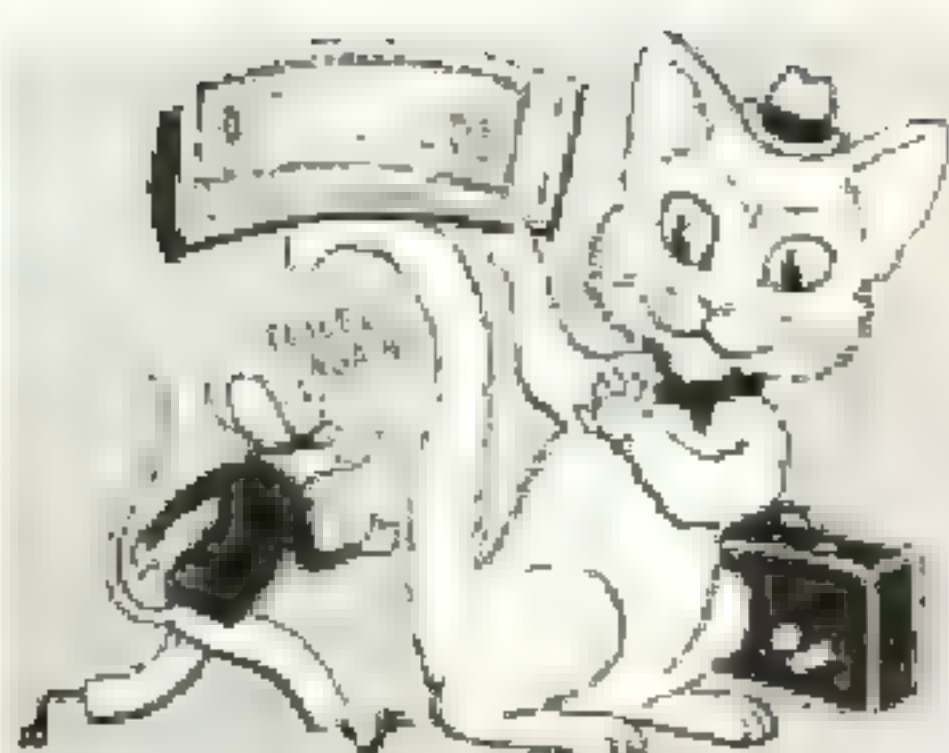


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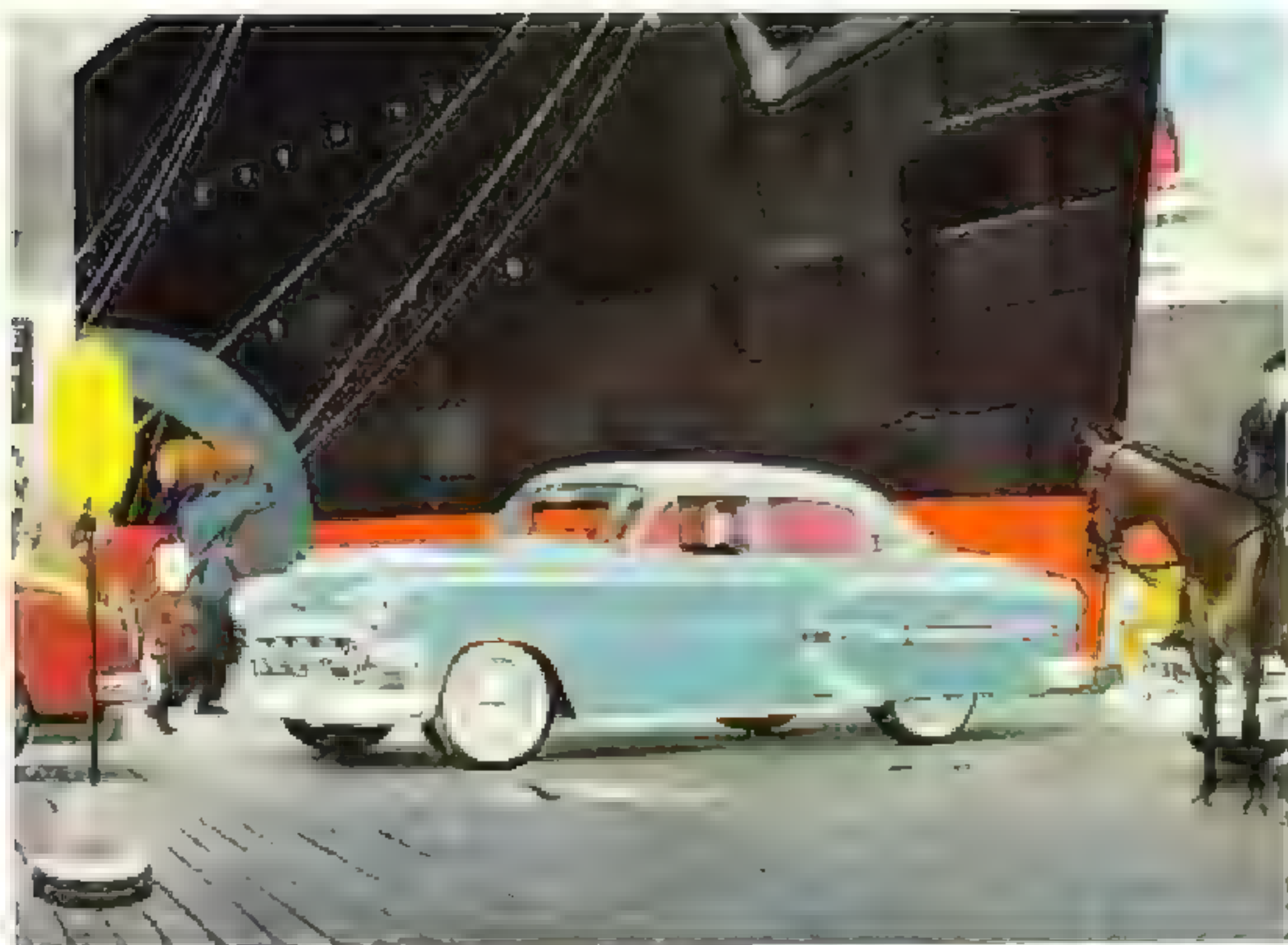
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up there and then you see Chevrolets.

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At every turn you find Chevrolets. And  
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For the reason that Chevrolets are made  
and sold in every part of the country. And  
Chevrolets are everywhere.

And if you go up to the top of the world,  
you see Chevrolets. And if you go down  
to the bottom of the world, you see  
Chevrolets. And if you go to the middle of the world, you see Chevrolets.

And if you go to the bottom of the world,  
you see Chevrolets. And if you go to the  
top of the world, you see Chevrolets. And  
if you go to the middle of the world, you  
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And if you go to the top of the world,  
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see Chevrolets. And if you go to the  
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in shape in  
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YOU CAN ENJOY a winter holiday now while you're still in the city. You can find a lot of places to enjoy the winter holiday season. You can find a lot of places to enjoy the winter holiday season. You can find a lot of places to enjoy the winter holiday season.

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people who are in the  
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7. 其他：如能进一步细化，将有助于提高研究的深度和广度。

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Love,  
John

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# Québec

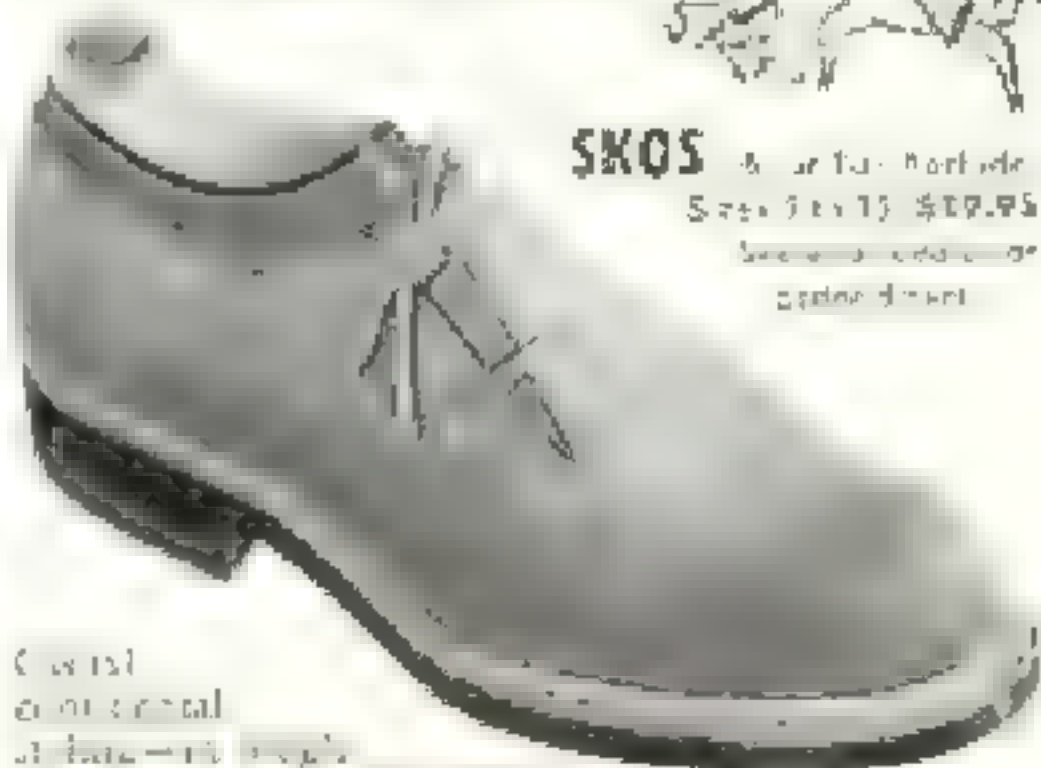
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For the sake of the common good, we must not let ourselves be led astray by the seductive promises of and promises of a new society without a new moral foundation. When we have lost our moral compass, we are lost.

[illegible]

**THE FIRST MAJOR USE** of polyurethane foam in the home is for sofa cushions. The foam is used in the chair seats, back cushions and the headrests. The foam is also used in the headrests of the car seats. The foam is also used in the headrests of the car seats. The foam is also used in the headrests of the car seats.

**FROM OIL AND GAS** These two commodities "is-  
suing" are obtained from petroleum and gas.  
Crude oil is refined into gasoline and kerosene  
and other products. Gas is used for heating and  
power.

**JEC PRODUCES GLYCOLS** As a marketing leader in the glycol business, JEC Chemicals, Inc. empowers the people of the world to "get on with it" by providing a wide range of glycol products for use in a variety of applications. JEC's glycol products are available in a variety of grades and quantities to meet the needs of your business.

[illegible]

**UNION CARBIDE**  
**AND CARBON CORPORATION**  
WEST POINT, N.Y. 10994 NEW YORK, N.Y.

The following table shows the results of the regression analysis for the dependent variable *Perceived Organizational Support*. The independent variables are *Organizational Commitment* and *Organizational Identification*. The table includes the regression coefficients, standard errors, t-statistics, and p-values for each variable.









## "She was fast asleep when the fire started

and discovered later  
that she hadn't been wide awake for years"

*(A true story based on Country Fire #11-12-13-14)*

It was late one windy night and old Mrs. Bartlett was lucky in two ways. Lucky that the wind was blowing the flames away from where she was sleeping and lucky that I came along while she could still get out.

But in a third way, luck was *against* her. For years she had been asleep to the increase in property values, had never increased her insurance to keep pace. She told me afterward that it fell short of covering her loss by almost \$1,500.

Don't push your luck too far. How long since you checked up on the value of your home? And your household belongings?

Even if that was only two or three years ago, you're running the risk of tragic loss, for values have gone up since. Last year's value reports to owners, you are probably *under-insured!*

Find out where you stand. Send for a free

report on your home's present coverage. Build-up your insurance to today's values.

Or, better still, phone your Hartford Fire Insurance Company Agent or your insurance broker. He'll tell you how much a year's additional coverage would cost, so, and now! Have him bring your insurance into line with today's increased values.



Year in and year out you'll do well with the

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Hartford Fire Insurance Company  
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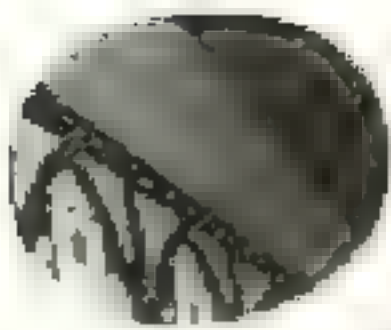
Hartford Accident and Indemnity Company  
Hartford F.S. Connecticut

Mention the National Geographic — It Identifies Us









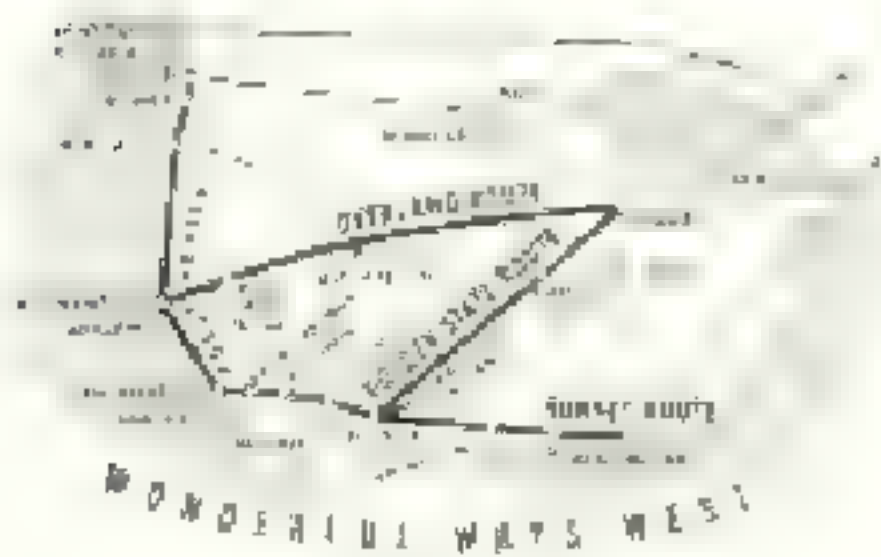
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MODERN TRAINS

More on the Sunset Limited - to the west




## Exotic Lands

[illegible]

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[illegible]


 I have read  
 the following and  
 agree with the  
 following:

*This Fall...You'll Find*  
MORE SMILES PER MILE  
**MISSOURI**

[illegible]

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to \_\_\_\_\_  
on \_\_\_\_\_

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1. **התאמה:** התאמה בין המצב הנוכחי לבין המצב הרצוי.  
 2. **התאמה:** התאמה בין המצב הנוכחי לבין המצב הרצוי.  
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*Trinidad  
and Tobago*

For the last few years, the most common cause of death in the United States has been heart disease, followed by cancer. But now, according to a study by the Centers for Disease Control and Prevention, the leading cause of death in the United States is now heart disease, followed by cancer.

**Trinidad & Tobago Tourist Board**

Sept 13, 1978 #2 SL 40.0 17 44 74

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From Denmark, Hall and Spaul, India, the former a member of the Communist Party and Spaul a member of the National American Woman's Suffrage Association, also are charged with the murder.

[illegible]

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## TRAVEL QUIZ

(FOR SEPTEMBER)



**What state produces the most eggs?**

☐ Minnesota ☐ Iowa ☐ Pennsylvania

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your business. Write the amount in numbers  
and words in the space provided. National  
Bank of Commerce Cashiers Checks for cash  
are cashed at the bank. Signature is all that  
is required to cash a check. Only one check may  
be cashed.

**Where will you find the Escorial?**

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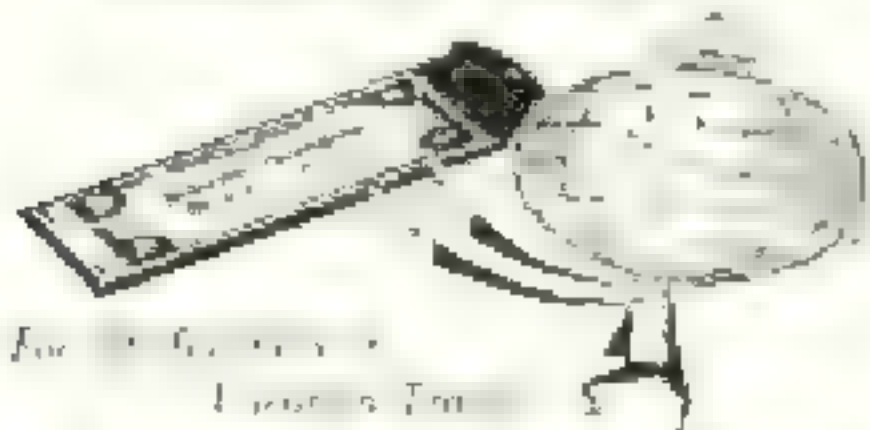
In Spain—one of the most remarkable structures in the world comprises palace, library, museum and observatory—located at Valladolid, one of the finest reported in America. It was designed by Juan de Herrera, Viceroy of Castile, in 1560.

Where was the first public railroad?

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 84

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of Chicago**  
*Travelers Checks*



DOI: 10.1002/for

Verfahren zur Bestimmung des Gehalts an  $\text{C}_{10}\text{H}_8\text{O}_2$  in  $\text{C}_{10}\text{H}_8\text{O}_2$  und  $\text{C}_{10}\text{H}_8\text{O}_2$

National Geographic's Unique Book

# Everyday Life in Ancient Times

[illegible]

These respondents' descriptions of the various types of work that they do are consistent with the findings of the previous studies. For example, the respondents in the Western U.S. described their jobs as being more complex and more challenging than those of respondents in the Eastern U.S. and the respondents in the Eastern U.S. described their jobs as being more routine and less challenging than those of respondents in the Western U.S. These findings are consistent with the findings of the previous studies.

Figure 2. The effect of the concentration of the inhibitor on the rate of polymerization of  $\alpha$ -methylstyrene in the presence of  $\text{K}_2\text{S}_2\text{O}_8$  at  $50^\circ\text{C}$ . The concentration of  $\text{K}_2\text{S}_2\text{O}_8$  was  $1.0 \times 10^{-2}$  mole/l. The concentration of  $\alpha$ -methylstyrene was 0.5 mole/l. The concentration of the inhibitor was (a) 0, (b)  $1.0 \times 10^{-3}$ , (c)  $2.0 \times 10^{-3}$ , (d)  $4.0 \times 10^{-3}$ , (e)  $6.0 \times 10^{-3}$ , (f)  $8.0 \times 10^{-3}$ , (g)  $1.0 \times 10^{-2}$  mole/l.

## Enlarged 10-Color Maps

## VALUABLE MAP INDEXES

**Historical Map of the United States**  
67 x 113 cm. This map shows the United States as it appeared in 1800. It includes all the territory that was part of the original thirteen colonies, as well as the land acquired from France in 1803. The map is oriented with North at the top.

Asian & Arabian Peoples 446 A.51

● 2010年12月1日，中国铁路总公司成立。

**Bible Bands—**4 1/2" x 4 1/2" (11.4 cm x 11.4 cm)

**Europe & the Near East— $5 \frac{1}{2} \times 10 \frac{1}{2}$ ":**  
 See also **CONTEMPORARY** and **MODERN** for related titles.

**Am. & Sov. Hemispheres—417** x 331, 2  
 English on one side, Russian on the other.  
 Author and ed. by John H. Garver.

**Sample Question—15%** *What is the purpose of the following passage?*

**The World—It's Big:** *It's a big world out there, and it's full of people who are looking for a good time. That's why you need a good time. That's why you need a good time.*

**Map Indexes.** The book includes a map of the study area, a map of the study area, and a map of the study area.

[illegible]

NATION 11. GEOGRAPHIC SOCIETY

**Abstract** 4-8, Washington DC, DD, E.



[illegible]

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**TO RICH**  
**FROM LARRY**

# TRAILWAYS

100 North State Street, Chicago, Illinois

**Keywords:** child abuse; child sexual abuse; child sexual exploitation; child sexual abuse investigation; child sexual abuse assessment



*Come Now*  
for a  
Delightful  
Leisurely

# VACATION in Old Virginia

Virginia offers an abundance of scenic beauty, historic landmarks, and recreational opportunities. The state is a treasure trove of natural resources, from the majestic Blue Ridge Mountains to the serene Chesapeake Bay. Visitors can enjoy world-class golf courses, pristine beaches, and charming small towns. The state's rich history is preserved in numerous historic sites, including the White House and the Pentagon. Virginia is a state of many faces, offering something for everyone.

Virginia is a state of many faces, offering something for everyone. From the majestic Blue Ridge Mountains to the serene Chesapeake Bay, the state is a treasure trove of natural resources. Visitors can enjoy world-class golf courses, pristine beaches, and charming small towns. The state's rich history is preserved in numerous historic sites, including the White House and the Pentagon. Virginia is a state of many faces, offering something for everyone.

MINISTER OF THE ENVIRONMENT  
DEPARTMENT OF  
CONSERVATION AND DEVELOPMENT  
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For more information, write to the Department of Conservation and Development, Box 1000, 1000 1000.



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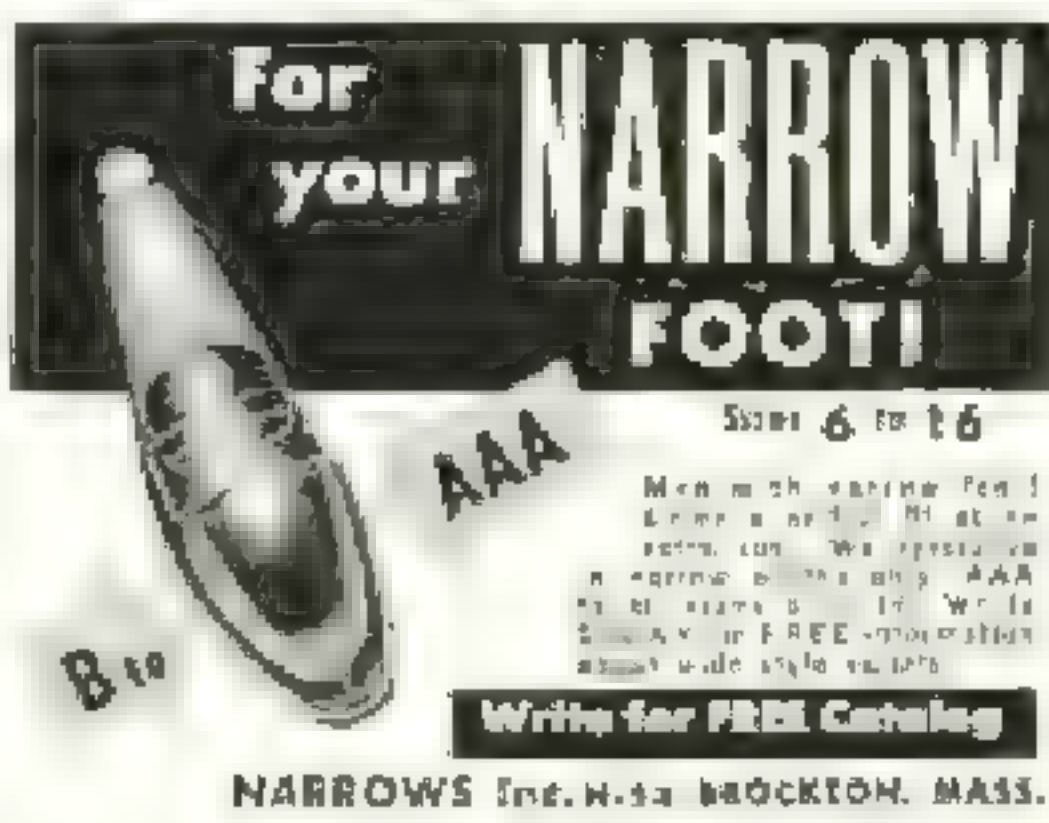
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## *A Toast to Model T*

■ For all the jokes that Model T inspired, the memory is one of affection and respect. And that is only right.

If it would never occur to you to build a house without a garage, it is because Model T established the principle of universal ownership of automobiles.

If you drive five hundred effortless miles in a day, it is because Model T forced the building of paved highways.

And it was a symbol of the manufacturing skill and integrity to which we, ourselves, subscribe. Remember the Model T slogan: Wherever you go you see it; wherever you see it, it's going.

No other single product has had so profound an influence on every aspect of the way we live today.

Our first association with the Ford Motor Company was making body parts for Model T, in 1918. It is an association we have prized ever since and enjoy today, and lends extra warmth to our congratulations to this great Company on the occasion of its fiftieth anniversary.

The Budd Company, Philadelphia, Detroit, Gary.





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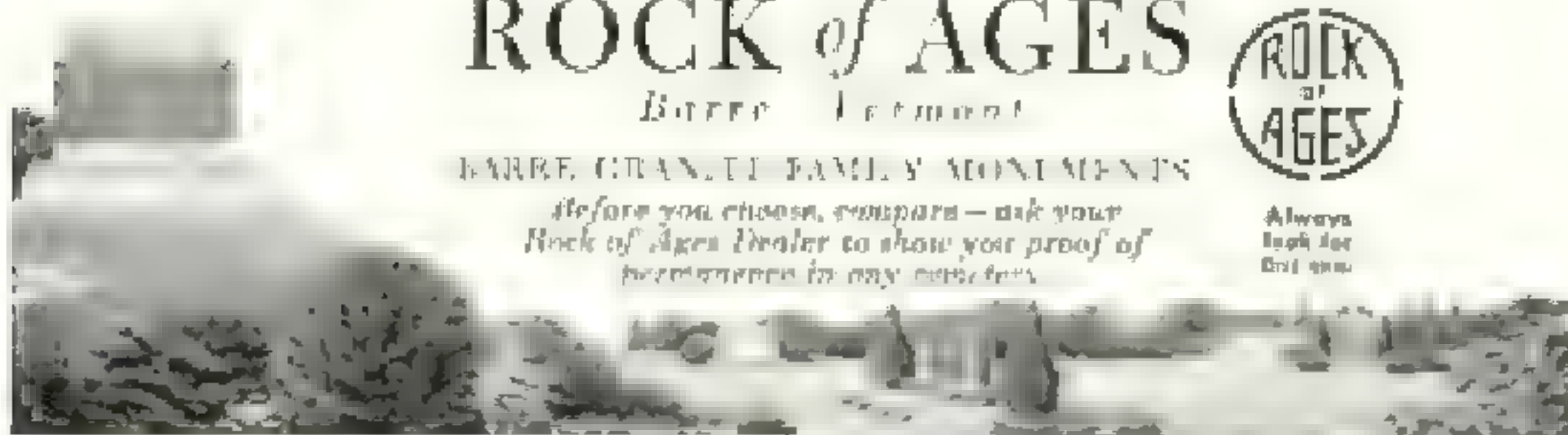
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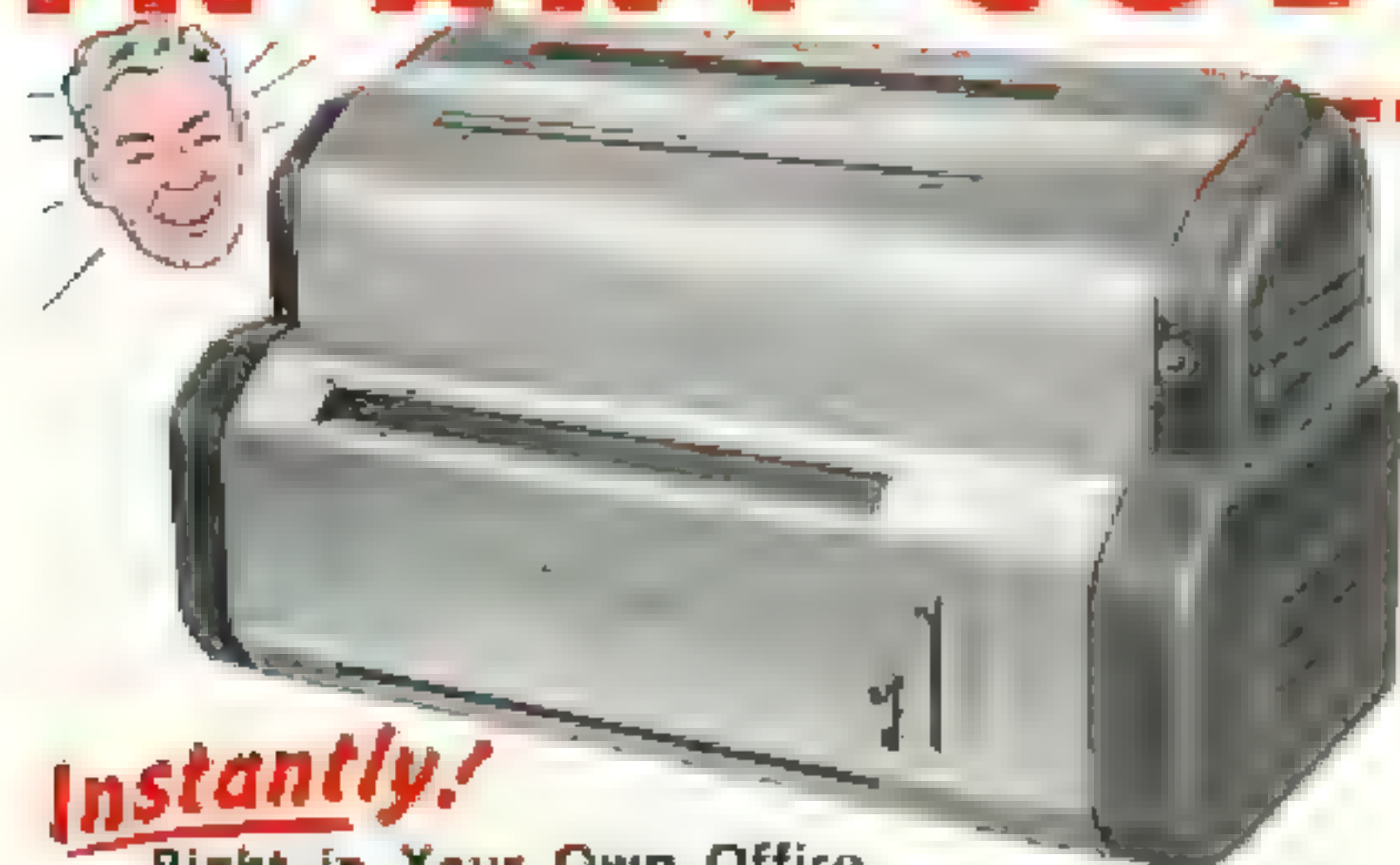
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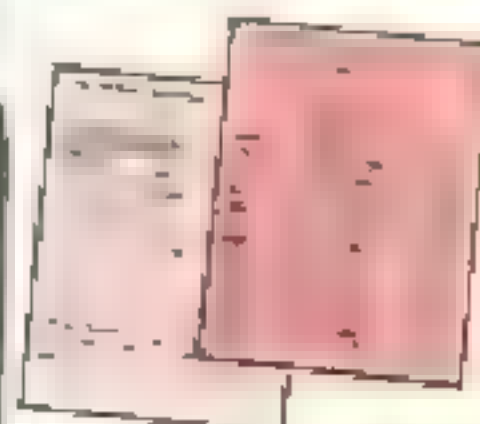
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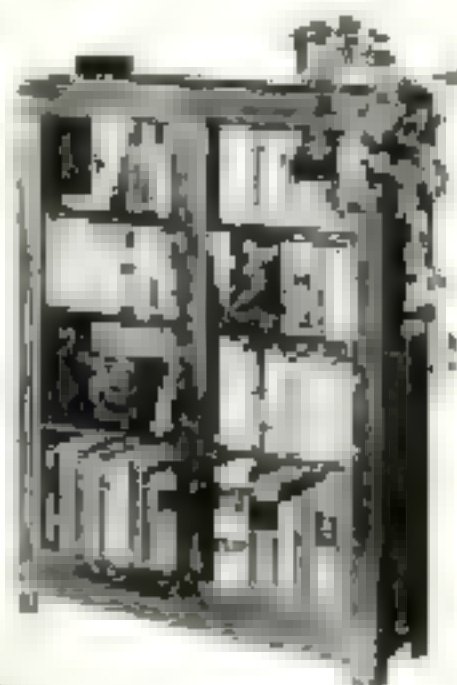


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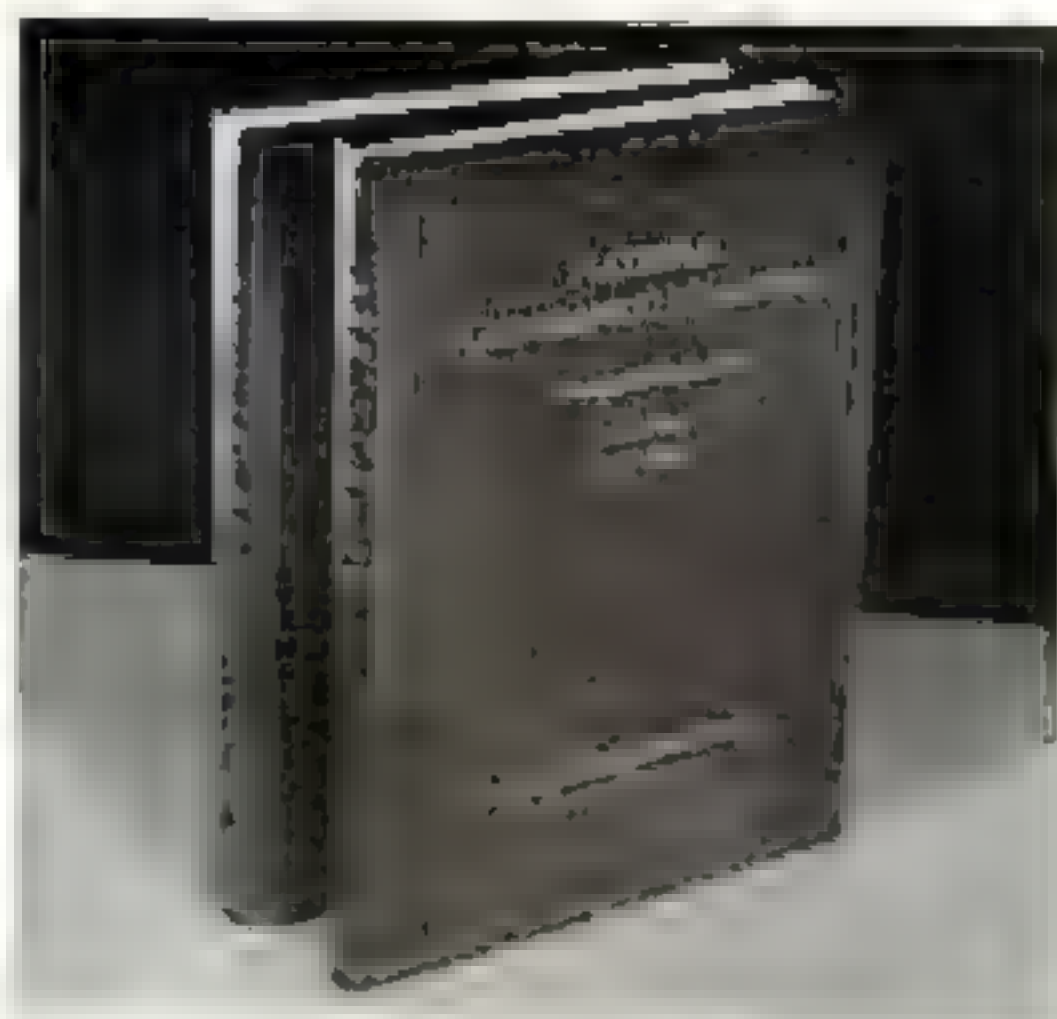
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These simple sketches show that even very young children can grasp the importance of safety and can apply its rules in their daily lives. In fact, our greatest hope of reducing the high toll of child road accidents depends largely on helping children to develop the attitudes and skills necessary for their safety now and in the future.

**Accidents kill annually about 14,000 children under age 15. In addition, some 2 million children are temporarily or permanently injured by accidents every year.**

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All children—especially those just entering school—should be warned to take safety precautions in the streets. If a child rides his bicycle to school, he should know and obey such rules as keeping to the right, riding single file and signaling for turns.

Children may also be helped to avoid accidents if parents themselves set a good example by consistently practicing habits of safety in the home and elsewhere. You can do this by checking your home and removing possible accident hazards.

If, despite your protection and training, your child has repeated accidents, it would be wise to consult your doctor. Sometimes accidents may be caused by physical or emotional conditions which he can be helped.

Remember that most accidents do not "just happen." Some authorities estimate that 90 percent or more of them are preventable. So, make your child safety-minded as he enters or returns to school.

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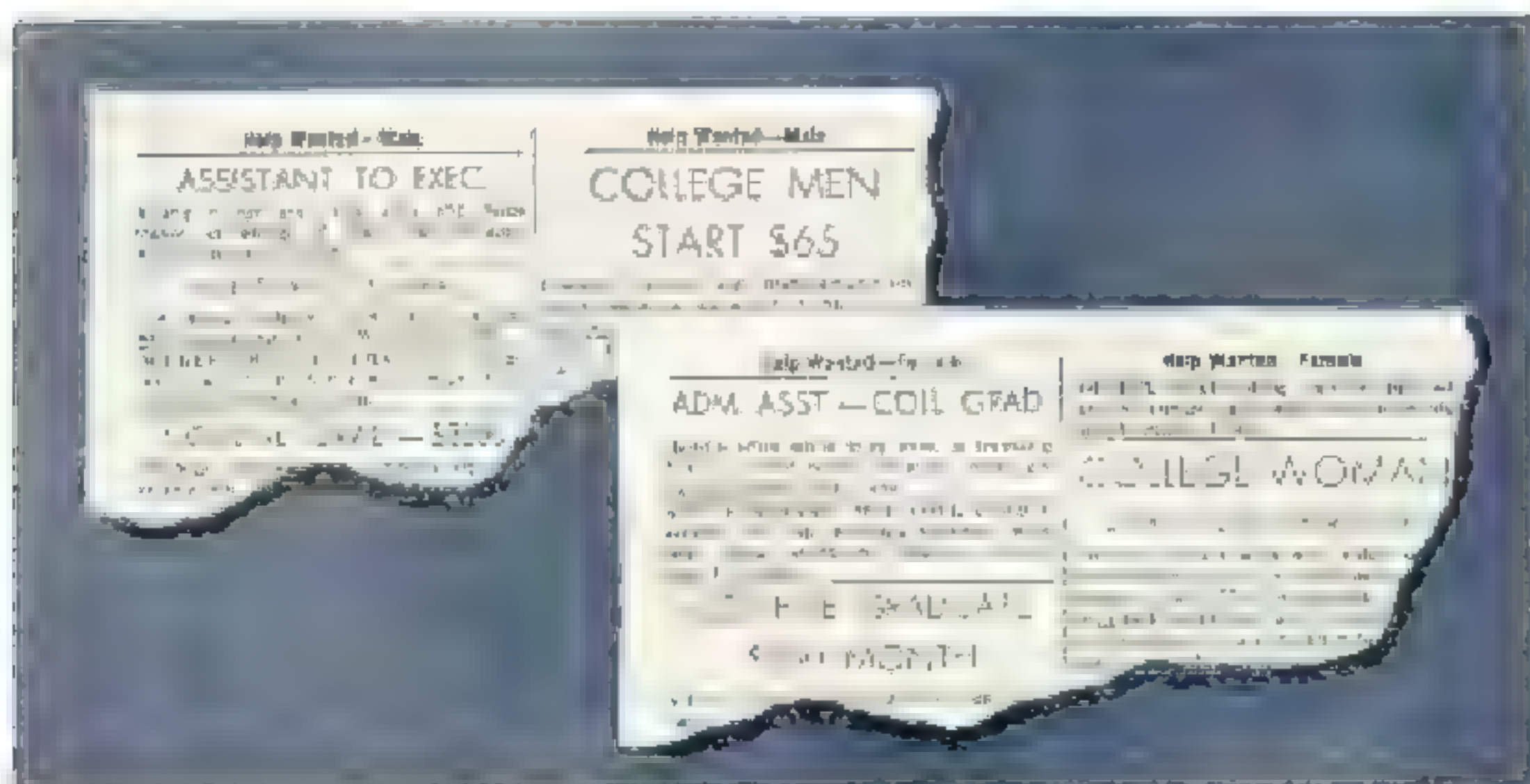
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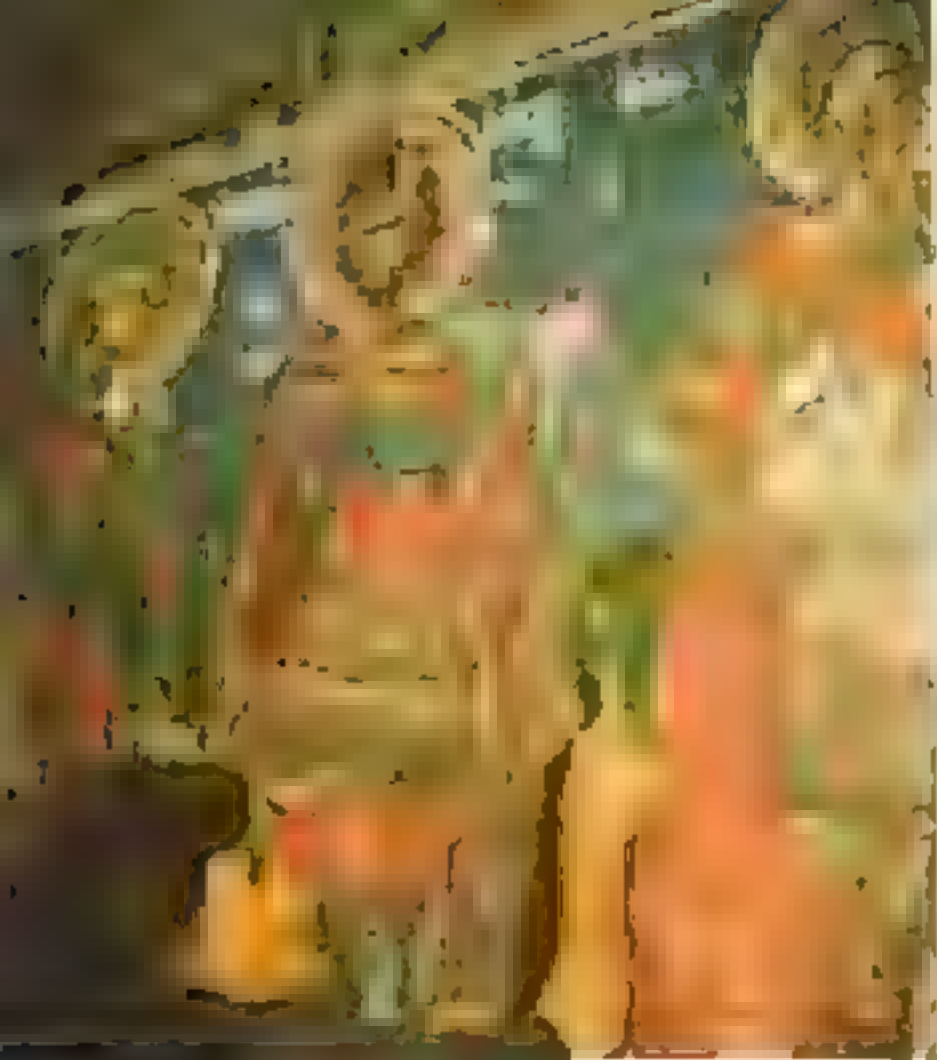


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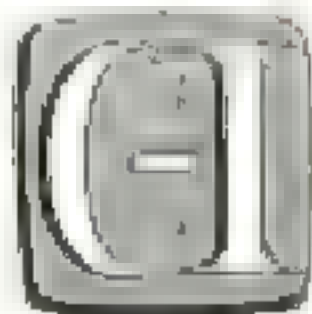
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The educational institutions listed in the Directory will be pleased to send catalogues and viewbooks to any National Geographic families expressing an interest in receiving additional information. By mentioning The Geographic, your inquiries will be assured the best possible attention.





**THE O'SULLIVANS AT HOME.** Clarence M. O'Sullivan, construction foreman with thirty-four years' experience; daughter-in-law Marilyn, clerical assistant for five years; and Mr. O'Sullivan's sons: Don, a telephone installer with seven years' service, and Clarence C., cable repairman with thirteen years' service.

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